



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 1.7.2003
COM(2003) 383 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL,
THE EUROPEAN PARLIAMENT, THE ECONOMIC AND SOCIAL COMMITTEE
AND THE COMMITTEE OF THE REGIONS**

**A Stronger European-based Pharmaceutical Industry for the Benefit of the Patient
– A Call for Action**

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**A Stronger European-based Pharmaceutical Industry for the Benefit of the Patient
– A Call for Action**

**Commission Response to the Report of the High Level Group
on innovation and provision of medicines - G10 Medicines**

Executive Summary

It has long been recognised that the European-based pharmaceutical industry plays a critical role in both the industrial and health sectors. It can make a major contribution to the strategic goal, set by the Lisbon Council in 2000, of building the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.

However, a report on the competitiveness of the European-based pharmaceutical industry commissioned by the European Commission concluded that; “Europe is lagging behind [the USA] in its ability to generate, organise and sustain innovative processes that are increasingly expensive and organisationally complex”.

The Council of Ministers, in its conclusions on Medical Products and Public Health of June 2000, underlined the importance of the identification of innovative medicines, with significant added therapeutic value, to the attainment of both industrial and public health sector goals.

Tackling the growing weakness in the EU pharmaceutical industry is a major policy concern and is an objective in itself, but competitiveness issues were also relevant to public health concerns.

In this spirit a new High Level Group on Innovation and the Provision of Medicines (called “G10 Medicines”), was set up by the Commission. In establishing the G10 Medicines Group the Commission wanted to create a new mechanism to take a fresh look at the problems facing the pharmaceutical sector and to come up with creative solutions. This new Group also had to take into account the combination of Community and national competencies that govern the pharmaceutical sector.

The G10 Group presented their report to President Prodi on 7 May 2002. It set out a framework of 14 wide-ranging recommendations.

The present Communication is the Commission’s response to the above Report. The Communication divides the Recommendations into the following five broad themes:

- Benefits to Patients
- Developing a competitive European-based industry
- Strengthening the EU Science Base

- Medicines in an enlarged European Union
- Member States learning from each other

In each area it sets out how the Commission would like the recommendations to be taken forward and, in areas of national competence, a proposed direction it believes Member States could take and what the Commission can do to facilitate the process.

Finally the Commission invites the Community institutions and bodies, the Member States and other stakeholders to take forward the key actions highlighted in this Communication with the objective of enhancing the competitiveness of the pharmaceutical industry in the context of achieving high level EU public health objectives.

1. INTRODUCTION

The European Council on 21 March 2003 concluded: “At Lisbon three years ago the EU set itself the strategic goal of building the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.¹” The European pharmaceutical industry can make a major contribution to this goal.

The pharmaceutical industry in Europe generates wealth and high quality employment while playing a central role in the development of public health with millions of people using medicines each day to protect and improve their health. Research also plays a central role in the sector both to sustain and develop competitiveness through the identification of innovation, but also in the constant search to improve the quality, safety and efficacy of medicines to the public.

The industrial landscape of Europe is made up of large and small and medium sized (SMEs) industry. This is also true of the pharmaceutical sector. This mix is a benefit to all regions of Europe.

The sector’s positive contribution to the trade balance in the European Union, the provision of highly skilled jobs, its contribution to public health and development of new environmentally friendly technologies will play a large role in meeting the Lisbon challenge of sustainable development.

A strong and steady commitment to innovation and research and development in both the private and public sectors is required. This is particularly the case in respect of high added value research programmes in “high risk” areas. It is for this reason that the Commission has placed great emphasis on the fostering of biotechnology. More and more medicines are currently being developed either partly or entirely through biotech-derived processes. In many ways biotechnology represents a large part of the future of the pharmaceutical sector.

However, a report on the competitiveness of the European-based pharmaceutical industry commissioned by the European Commission² concluded that; “Europe is lagging behind [the USA] in its ability to generate, organise and sustain innovative processes that are increasingly

¹ Presidency Conclusions of the Brussels European Council 20 and 21 March

²“Global competitiveness in Pharmaceuticals, A European Perspective” by Professors Gambardella, Orsenigo and Pammolli. Published as Enterprise Paper No 1 2001.

expensive and organisationally complex”. Europe is faced with a number of structural weaknesses:

- markets are not competitive enough;
- Research and development in the EU is hindered by fragmented research systems and a lack of a coherent and integrated approach between public and private sectors;
- A weak growth in R&D spend: the USA has led the way in developing new technology suppliers and innovation specialists; and R&D spending in the USA grew at twice the rate of the EU during the 1990s.

In order to stop the process of erosion Europe must act now if it is to retain its attractiveness as a location for industry in the years to come and prevent the loss of our highly skilled scientists.

It has been long recognised by the Commission and Member States that the pharmaceutical sector plays an important health, social and economic role in the Union. The Internal Market Council on May 1998 recommended that Community policy should address, among other priorities, the need to strengthen the competitiveness of the European pharmaceutical industry with particular regard to encouraging research and development³. This was followed by the Commission Communication on the Single Market in Pharmaceuticals⁴ in November 1998 which highlighted the importance of the sector and suggested a number of ways to reinforce the competitiveness of the industry. Furthermore, a number of existing EU policies have an impact on the pharmaceutical sector, in particular:

- Completing the Single Market and ensuring it functions effectively;
- Initiatives to enhance the functioning of the business environment and to improve competitiveness;
- The development of sustainable economic development;
- Initiatives to boost innovation and research; and
- Action to ensure a high level of human health protection.

Critical progress has already been made with the establishment of the Community marketing authorisation procedures and the creation of the European Medicines Evaluation Agency (EMA) in 1995. The Commission intends to build upon this success by updating and streamlining the existing legal framework, as set out in the package of reforms contained in the Review of the Pharmaceutical legislation submitted to the Parliament and the Council in November 2001. The Commission remains committed to completing the single market in pharmaceuticals with the final objective that every medicine authorised in the EU will be available to patients in all Member States. Part of this process is ensuring that the confidence in the system is enhanced. A genuine single market would provide more patient choice at an affordable cost as well as making the EU a more attractive place for R&D investment. The adoption of the Euro has made a contribution by providing a more stable market environment.

³ Internal Market Council Conclusions 18 May 1998.

⁴ COM(98)588

In March 2000, a health policy advisory group to the Commission⁵ stated that the public health goal of the pharmaceutical sector is “to make readily accessible, efficacious, high quality and safe medicines, including the more recent and innovative ones, to all those who need them, regardless of their income or social status⁶” The Council of Ministers, in its conclusions on Medical Products and Public Health⁷ of June 2000, underlined the importance of the identification of innovative medicines, with significant added therapeutic value, to the attainment of both industrial and public health sector goals.

The twin policy developments in the industrial and public health spheres highlight the critical dual role played by medicines. Tackling the growing weakness in the EU pharmaceutical industry is a major policy concern and is an objective in itself. But competitiveness issues were also relevant to public health concerns. Future policy would need to take this into account.

In this spirit a new High Level Group on Innovation and the Provision of Medicines (called “G10 Medicines”), was set up by the Commission.

The G10 Medicines initiative must be seen as a useful contribution within the context of a broader European industrial policy. A sound industrial policy inevitably brings together a horizontal basis and sectoral applications which have to take into account the specific needs of a particular industry such as pharmaceuticals.

In establishing the G10 Medicines Group the Commission wanted to create a new mechanism to take a fresh look at the problems facing the pharmaceutical sector and to come up with creative solutions. This new Group also had to take into account the combination of Community and national competencies that govern the pharmaceutical sector. For reasons of efficiency, the Group was kept small and at a high level. It was composed in a balanced way with membership drawn from five Member States, 4 industry representatives, one patient-related organisation and one representative of European mutual health funds (the full membership is set out at Annex C).

This approach encouraged a good working atmosphere which helped to create the consensus necessary to develop the wide-ranging recommendations published in their report after only a year.

The Commission has carefully considered the Group’s recommendations and welcomes the analysis and approaches proposed. The purpose of this Communication is to set out how the Commission sees these recommendations being taken forward in the current context. In areas of national competence the Commission sets out a proposed direction it believes Member States could take and what the Commission can do to facilitate the process.

This Communication has been prepared in the spirit of the consensus of G10 Medicines with consultation of experts from the Member States and other interested groups through committees, stakeholder meetings and various workshops. Although the proposals it contains are intended to establish a way forward in the same atmosphere the Commission accepts that G10 Medicines members may not be able to support all the proposed courses of action.

⁵ Created by the High Level Committee on Health

⁶ From the report of the Working Group on Pharmaceuticals and Public Health, ‘Pharmaceuticals and Public Health in the EU; Proposals to the High Level Committee on Health for policies and actions in the framework of the Treaty of Amsterdam’. 8 March 2000.

⁷ Council Conclusions of 29 June 2000 on Medical Products and Public Health (2000/C 218/04)

2. IMPLEMENTATION OF THE RECOMMENDATIONS OF THE G10 MEDICINES REPORT

2.1. Benefits to Patients

Achieving real and long lasting benefits to patients, and the wider public, is a key objective of pharmaceutical policy. Several trends have emerged in recent years that require a rethinking of the way in which people interact with health care services, and more specifically how people access, and use, medicines. Principal amongst these are the increasing availability of health care information, the development of the patient as a partner in decision making, and the increasing mobility of people, goods and services in Europe.

The G10 identified two major approaches that it felt could generate significant benefits to patients. The first approach centres on the individual's growing role as an important decision-maker in health care. Here the G10 identified the need to strengthen the quality and availability of information available to patients, and the need to increase capacity for their collective influence and decision-making at European policy level. The second approach focused on measures concerning the relative effectiveness of medicines, and the need to improve pharmacovigilance systems that can ensure the on-going safety of medicines on the market.

This section groups together the G10 recommendations that call for actions that will offer direct and tangible benefits to patients. However, the intention of the G10 process is that actions towards all other recommendations will provide some measure of indirect benefits to patients, and consumers of medicines through improving the functioning of health systems.

Key tasks

Improving pharmaceutical information to patients

People are demanding and using health information on an unprecedented scale. This is linked to the change from the individual as a passive recipient of health care and advice to that of a more empowered and more proactive consumer of health care. The greater access to information, combined with changing attitudes, is having an impact on the traditional patient-doctor relationship.

People are seeking information from an ever growing, and diverse, range of sources, particularly via the Internet, to supplement advice received from health care professionals. Ensuring that the information available is reliable is essential if it is to contribute to positive public health outcomes. There are also a number of documented initiatives at national level to provide information services to patients including on treatment options for particular diagnoses. In its conclusions on Medicinal Products and Public Health of June 2000, the Council of Ministers acknowledged the proliferation of largely Internet based information sources by underlining the need to develop objective information to the public, and to health professionals.

The Commission aims to provide a realistic and practical framework for the provision of information to patients on medicinal products. The Commission will explore with member states the need to share information and to build common approaches if appropriate.

The Commission's objective is to improve the quality of information to the public, and to encourage the development of approved sources that people can trust. In this context, the G10 stressed that quality information is that which is objective, comprehensive, readable, accurate and up-to-date. With strict emphasis on ensuring the quality of information provided, the

Commission agrees that innovative solutions to the provision of information should be investigated. The Commission will explore a range of approaches, involving the different stakeholders including consumer and patient groups, academics, the pharmaceutical industry and competent authorities in Member States.

Ensuring that patients consume medicines appropriately is a key stage in the rational and effective use of medicines for public health. The patient information leaflet (in combination with the label) provides a source of authorised information on critical issues concerning the safe and effective use of a medicine, such as dosage, contra-indications, special precautions for use etc. It should be able to complement, for self-medication products, the advice of a health care professional.

As part of the Review of Pharmaceutical legislation the Commission has proposed, and reached a political agreement with the Council of Ministers, to re-order the information in the patient information leaflet to improve their comprehensibility. This will be combined with mandatory readability testing of leaflets. The EMEA is undertaking a project to consider new ways of ensuring that information medicines takes more account of patient needs.

In addition, considerable efforts have been made to improve the availability of orphan medicines. It is now important that efforts are made to inform health professionals of the existence of these medicines, and their benefits.

Actions to improve information to patients can draw on a number of recent initiatives, in particular the recent e-health Commission communication on “Quality criteria for health-related websites”⁸. Follow on work to this Communication is envisaged to debate the possible development of European seals of approval for health-related web-sites in a joint action foreseen under the new public health programme with eEurope 2005.

The EU established its own pharmaceutical telematics strategy in 2000 which has, as one of its objectives, to enhance the Europharm database of the EMEA to support regulatory activity and to provide a harmonised set of information on all products. There should also be a better European system to facilitate the sharing of pharmaceutical data for public health, in particular, one that would enable comparative analyses to be carried out.

Key actions

- A major component of the new public health programme will be to establish an information and knowledge system. This will give rise to extensive dissemination of information concerning all aspects of public health. A European Health Portal is being developed in order to disseminate this information to health authorities, professionals, citizens and patients alike. In areas of national competence, ways will be sought to provide links from the EC Health Portal to national health sites.
- The Commission will explore, with stakeholders, a range of approaches to provide a realistic and practical framework for the provision of information on prescription and non-prescription medicines.
- The prohibition on advertising prescription medicines to the public will remain. However, non-prescription medicines will continue to be advertised to the public in full respect of the general requirements for honest, truthful and not misleading advertising.
- Competent authorities hold substantial information on medicines and much of this is of significant interest to health professionals and the general public. It is important that this is made widely available and the Commission, involving the EMEA, will be pro-active in encouraging the Member States to share this information with a wider group of stakeholders, including the general public.

⁸ COM (2002) 667

- The newly created European Patients Forum (see below) also provides a mechanism to consider patient's needs in relation to information and how these can be best met.
- To increase public confidence in patient information on medicines, the Commission will reflect on establishing a collaborative Public Private Partnership involving a range of interested parties including representatives from public authorities, industry, health funds, health care professionals and patient groups. It could take the form of a small body that would be able to advise and monitor the quality of the information already provided and produce guidelines in specific areas to support the work of national and Community regulatory authorities.
- In terms of Patient Information Leaflets, the Commission is proposing, through the Pharmaceutical Review, a reordering of the information to improve their comprehensibility and introduce mandatory readability testing.
- The EMEA is undertaking a project, with patient organisations, to consider new ways of ensuring that information on medicines takes more account of patient needs.

Strengthening the role of patients in public health decision-making

Patient groups have an important contribution to make to the development of health and medicines policy by articulating the needs and views of patients, scrutinising new policy proposals and calling policy makers to account. Co-operation with patient groups is one mechanism to empower patients to take more responsibility for the treatment of their condition or disease. Patient-oriented groups and other public health non-governmental organisations can also provide different treatment and care services as well as social support. This is already happening in many EU countries.

The co-ordination of patient groups is rapidly developing at EU level, and this will become particularly valuable as international patient mobility increases. To bring forward this work, the Commission has encouraged and supported efforts to create a European umbrella organisation bringing together patient groups across Europe. This has led to the foundation of a European Patient Forum in February 2003.

More generally, in 2001, the Commission set up an EU Health Forum⁹ which brings together European health stakeholders to discuss common issues and to provide input into the policy process at EU level. Patients groups play a strong role in this. This initiative reflects the growing awareness of the importance of developing civil society mechanisms to play a role in health policy decision-making, an importance which EU enlargement will increase.

The Commission has also ensured that patient views are integrated into the High Level Process on patient mobility and health care developments in the European Union. The European Patients' Forum is taking part in this process alongside Ministers of Health and key stakeholders.

⁹ Membership of the group comprises stakeholders in the health field including public health and patient groups, health professionals, health service providers and health-related industry organisations. More details can be obtained from: http://europa.eu.int/comm/health/ph_overview/Health_forum_en.htm

Key actions

- To make available, under the new public health programme, funding for the patient and other public health organisations for networking activities at an EU level and projects on patient information within the priorities set by the programme decision and the annual work programme.
- To encourage the patients' groups, including the Patients' Forum, to take forward work to define patients' needs in relation to issues of information, and to explore more generally the role of the patient in health systems, and to ensure that patient rights are properly considered in future policy developments.
- Patients' organisations will have access to the information disseminated through the public health portal systems under development in the Public Health Programme

Relative effectiveness

The concept of relative effectiveness is an increasing feature of Member State evaluation of health technologies. The development of new medicines and other technologies that provide additional therapeutic benefits will contribute to maintaining progress in improving the quality and effectiveness of health care. The Commission's objective is to provide a forum for Member States, who wish to use relative effectiveness measures, to share ideas on how they may be operated effectively, quickly and placing the minimum burden on the parties involved.

Relative effectiveness, as applied to health care technologies such as medicines, has two components: the added therapeutic value (ATV) of a medicine (its clinical effectiveness compared to other treatments), and its cost effectiveness, which builds on ATV and brings cost considerations into the comparison. Cost effectiveness considerations are being increasingly brought into pharmaceutical pricing and reimbursement decisions by competent authorities. Particularly as the continuous incorporation of new health technologies into health care systems is an important driver of rising health care costs. ATV considerations are of interest to a wider group of health stakeholders including health professionals and patients, as well as competent authorities. It is important that this information is effectively communicated to them.

In terms of pricing and reimbursement decisions, there are a variety of compulsory and voluntary systems in Member States which provide a mechanism for allocating limited resources that take account of relative effectiveness, in particular cost effectiveness, issues. The Commission wants to see that such schemes operate as smoothly as possible and, in particular, that patients have quick access to important new medicines. The Commission has a specific responsibility for ensuring the Transparency Directive (Council Directive 89/105/EEC) is implemented correctly. The application of relative effectiveness criteria in member states has a direct impact on prices and reimbursement. While the Commission recognises that pricing and reimbursement decisions are the responsibility of each Member State, there is a clear common interest in generating and sharing information in order to increase the transparency and effectiveness of relative effectiveness procedures

It is the Commission's view that the authorisation process for medicines must continue to focus on the key public health criteria of safety, quality and efficacy. The issue of relative effectiveness, while important, should be kept entirely separate from this process as it is most useful once the medicines are on the market and being used alongside existing therapeutic options.

Key Actions

Within the context of Pricing and Reimbursement

- Provide a forum for member states to generate and share information on common relative effectiveness issues in the context of pricing and reimbursement decisions. A working group of member states has been established, within the framework of the Transparency Committee, to develop, eventually, common methodologies for the assessment of relative effectiveness. The group will:
 - Take stock of which member states rely on a comparison between different products in deciding their price or reimbursement, what is exactly compared, methodologies currently used by member states in their assessment of relative therapeutic value, frequency of assessments, information on which the comparison is based, by whom is the assessment carried out and in what manner
 - Consider to what extent there are currently common themes in national approaches to relative therapeutic value and what individual practices might be of general relevance in other member states
 - Consider extending the stock-taking exercise to national cost-effectiveness programmes if the above approach has proved to be of value.

Within the context of wider public health issues

- Develop further projects as part of the new public health programme to strengthen evaluation of ATV. This could include the development of ways to share information to health professionals and to patients, in collaboration with other European bodies.
- The Commission will take forward work on health technology assessment under the new Public Health Programme (2003-2008). Proposals are being sought in relation to developing mechanisms to bring together competent authorities in the EU and applicant countries, and where applicable, other stakeholders with the aim of enabling them to co-operate more closely in health technology assessment. This topic is also being pursued under the High Level Process of Reflection on Patient Mobility and Health Care Development in the EU.

The Commission will ensure coherence to prevent any duplication of activities between the work of the Transparency Committee and the Public Health Programme.

Pharmacovigilance

A strong pharmacovigilance system is vital to ensure patient safety in relation to the use of medicines. It is an essential part of the framework of controls that govern the safety, quality and efficacy of medicines throughout their lifecycle. When a medicine is first authorised, all the safety information is based on experience gained during clinical trials. Once placed on the market, and used by a much wider population, substantially more information becomes available about the incidence of adverse reactions in relation to its use in the general population, and specific groups, such as young children.

Pharmacovigilance systems are designed to continuously collect and disseminate this information to competent authorities in Member States, who must make judgements about whether to vary, suspend or withdraw the marketing authorisation if risks to public health are identified. It is sometimes the case that new uses for the medicine are identified and its scope of indications is widened.

Both industry and Member States are already required to collect and evaluate data on side-effects to medicines and take appropriate action. These activities are supported by the EMEA, which provides a co-ordinating role for the EU. Although national pharmacovigilance systems have proved their worth, it is clear that there is a strong case for strengthening the co-

ordination of these activities. Reinforcing EU pharmacovigilance is, therefore, a major theme of the pharmaceutical review and a priority for the Commission's telematic strategy. The Commission believes that these measures will make a significant contribution to the overall objective of ensuring that medicines are more safely and effectively used.

Key actions

- Enhance the pharmacovigilance role of the EMEA
- Establish the framework conditions, and increase the frequency, of pharmacovigilance reporting for new medicinal products; and
- Further develop the EudraVigilance database of safety information relating to all medicines on the market in the EU.

2.2. Developing a competitive European-based industry

The Commission's objective is to retain and develop a dynamic and thriving EU-based pharmaceutical industry to help meet our challenging economic, social and public health goals. As the EU's 5th largest industrial sector, providing the biggest single contribution to the European trade balance in high-technology and R&D intensive sectors and offering a key source of high skilled jobs, the pharmaceutical sector can make a significant contribution to attaining the goals set by the European Council in Lisbon in March 2000.

The EU institutions have a role to play to ensure that there is a strong and modern legislative framework that ensures all the sectors operate smoothly. However, Member States at their national level must ensure that new medicines are made available to their patients as quickly as possible. A comprehensive approach, that takes account of national and European competence, must be taken if substantive progress is going to be made in this area. The key issues that must be addressed are:

- a) Updating the regulatory structure, to speed up the authorisation process;
- b) Access to innovative medicines, to put in place the right conditions to encourage the development of, and the speed of access to, these medicines;
- c) Timing of reimbursement and pricing negotiations; in particular, the need for national action to enhance the transparency and the speed of the pricing and reimbursement procedures;
- d) Full competition for medicines that are neither purchased nor reimbursed by the State;
- e) Developing a competitive generic market; and
- f) Developing a competitive non-prescription market.

Key Tasks

a) Updating the Regulatory Structure

After completing the technical harmonisation of the sector, significant progress has already been made with the introduction of the Community marketing authorisation procedures and the establishment of the European Medicines Evaluation Agency (EMEA) in 1995. The G10

Group identified two ways of improving the Community marketing authorisation scheme: shortened assessment times in line with public health requirements and enhanced use of telematics. Under the Pharmaceutical Review there are proposals to improve the functioning of both the Centralised and Mutual Recognition Procedures. This will speed up the evaluation process and shorten the time for the final decision to be taken. These would make the average authorisation time for a new medical product to be one of the fastest in the world. In the meantime, the Commission and the EMEA have already reduced the length of their own internal procedures as far as possible within the current legislative framework.

However, real progress in this area can only be achieved in partnership with Member States. National pricing and reimbursement systems may introduce additional delays to marketing of a medicine. A recent study showed that this process has delayed full access to the market by at least another year in a number of Member States¹⁰.

b) Access to innovative medicines

The G10 identified this as a critical issue. It is important from an industry perspective because the cost of developing new medicines has increased significantly¹¹, and companies should be able to begin to market their products as soon as they are licensed. At the same time, it is equally important that innovative medicines reach patients quickly at affordable prices. This is part of improving the overall responsiveness of the health care system.

The Commission, in co-operation with the EMEA, is aiming at a more transparent approach to the assessment of medicines. In particular, by improving dialogue during drug development, making the best use of national resources and speeding up the assessment procedures.

Support for the development of innovative medicines will also come through the 6th Framework Programme for Research (FP6) which has a key thematic priority is research into “Life Sciences, genomics and biotechnology for health”.

In addition the Commission, through the Pharmaceutical Review, has proposed several measures to provide incentives to support research into innovative medicines. At the heart of this, is data exclusivity. The Council has reached a political agreement to harmonise data protection at ten years. For medicines authorised under the mandatory centralised procedure it would be ten years with the possibility of extending this by one year if the manufacturer can demonstrate that the medicine can be authorised for a new indication. For medicines authorised under the mutual recognition procedure or the optional centralised procedure the period would be also be ten years with the possibility of generic medicines to launch their application for a marketing authorisation two years before the expiry of this ten year period.

An important tool for speeding up the regulatory process will be the increased use of telematics. In 2000 the EU established its own pharmaceutical telematics strategy together with a detailed implementation plan allowing a more efficient use of the available resources. The priority projects included in the strategy are: EudraNet (to allow efficient and safe exchange of information between competent regulatory authorities), EudraVigilance (to support pharmacovigilance activities), the EuroPharm database (to support regulatory activity and to provide a harmonised set of information on all products) and the databases concerning clinical trials.

¹⁰ Cambridge Pharma Consultancy: Delays in Market Access. December 2002.

¹¹ EFPIA estimated of cost of developing a new chemical or biological entity in 2002 at €895 million

Key Actions

- A fast track assessment procedure for medicines that are of major public health interest. The statutory time limit for assessing these marketing authorisation applications will be reduced from 210 – 150 days.
- Shortening of the decision-making procedure, after scientific evaluation.
- Widening the scope of the Centralised Procedure to include all new medicines indicated for HIV/AIDS, cancer, neuro-degenerative diseases and diabetes to contribute to the goal of giving all European patients access to important medicines.
- Improve the functioning of both the Centralised and the Mutual Recognition Procedures to complete the Single Market in Pharmaceuticals.
- Data exclusivity, through the Pharmaceutical Review, to be harmonised at 10 years for all products to bring it into line with the annual protection awarded under the Centralised Procedures. In order to promote research on new therapeutic indications with a significant clinical benefit an extra year of data protection should be granted for such indications.
- Together with Member States, support the EMEA to successfully manage and complete projects under the Telematics Strategy.

c) *Timing of Reimbursement and Pricing Negotiations*

There is a wide variety of pricing and reimbursement schemes within the EU as a result of differences in the way that health care systems have developed over time. The Commission recognises that each Member State has the responsibility to ensure adequate supplies of medicines while controlling healthcare expenditures. In all Member States the costs of health care are rising. The focus should be on securing the most effective treatment for the patient within an effective healthcare system. Pharmaceuticals account, on average, for 15%¹² of health budgets. Member States also have an obligation under Directive 89/105/EEC¹³ to ensure that decisions on pricing and reimbursement are taken transparently in a non-discriminatory way and within a precise timeframe.

To improve the implementation of this Directive, the Commission has recently held meetings of the Transparency Committee¹⁴ to conduct a “preventive dialogue” with Member State competent administrations to help resolve emerging difficulties or interpretation issues. One early result of this will be the establishment of a set of updated data on current Member State administrative practices and regulations. These validated data, will be analysed in the context of the implementation of Directive 89/105/EEC..

Promoting market integration and alternative ways to control expenditures

Member States have clear competence to take national measures in order to control healthcare expenditures. For the time being, prices - both ex-factory and retail - are widely divergent amongst Member States. Enlargement will increase these disparities further. The introduction of alternative ways to regulate pharmaceutical-related healthcare expenditure could be needed to alleviate the growing impact of these price differentials.

¹²Taken from “Benchmarking Pharmaceutical Expenditure” published in 2001 by the Austrian Health Institute.

¹³ Council Directive 89/105/EEC relating to the transparency of measures regulating the pricing of medicinal products for human use and their inclusion within the scope of national health insurance systems.

¹⁴ Committee on Transparency in the pricing mechanisms of medicinal products

Wide differences in administratively-fixed prices can be detrimental to a smooth functioning of the internal market. In addition, the length, complexity and diversity of current pricing and reimbursement procedures in general, conducted prior to the effective launch of a product, may significantly delay the marketing and, thus, the availability of this product for the concerned patients.

In order to give an appropriate answer to these problems, the Commission considers that a reflection should be launched on finding alternative ways to control national pharmaceutical-related expenditure by Member States. More competitive and dynamic market mechanisms will facilitate the objective of creating a more integrated market. One option could be based on the principle that manufacturers are given the possibility to set the prices of products, while negotiating with the Member States safeguard mechanisms to contain pharmaceutical expenditure for example, yearly pay-backs or rebates calculated on the revenues generated by these products on the national markets. Obviously such a system would need to be developed, and run, in compliance with EU Treaty obligations, in particular those concerning the principle of free movement of goods and competition. In particular, they should not result in the implementation of a dual pricing system in order to impede parallel trade¹⁵. In order to minimise any disruption to healthcare systems in the Member States, this approach could be focussed on new products that have been authorised under the Centralised Procedure before they are launched on the market.

Such system is meant to open the way for the free fixing of prices in the market as with any other product. This would allow the emergence of a single EU “ex-factory” price by allowing companies, if they wish to have greater control over setting the price of their products while still providing Member States with an adjustable “safety net” to cap pharmaceutical expenditures. At the same time, it could facilitate faster access by patients to newly authorised innovative products. The concrete ways of implementing this possible approach must be left to the consideration of the Member States; the Commission’s role being limited to checking the compliance of national measures with Community Law.

Key actions

- Member States to examine their existing pricing and reimbursement systems to ensure that they operate fully in accordance with the Transparency Directive.
- The Commission and Member States should, as a priority, examine the scope for improving time taken between granting of a marketing authorisation and pricing and reimbursement decisions in order to reduce this time to the absolute minimum.
- The Commission will, in parallel, launch a reflection on finding alternative ways of controlling national health care expenditures including the option of letting manufacturers set the prices of new products, while negotiating appropriate safeguards in compliance with EU competition rules.
- Under the 6th Framework Programme research will be undertaken on comparing member states’ health costs at individual service level and on performance assessment of health care institutions.

d) Full Competition for Medicines neither Purchased nor Reimbursed by the State

More efficient market mechanisms and, in particular, price competition for non-reimbursed medicines, would provide, in this sector, more patient choice at a more affordable cost. However, as far as different prices are set for medicines that are sold to the private sector and

¹⁵ See Commission Decision of 8 May 2001 (O.J.L 302, 17.11.2001, p.1)

such that are sold to the public sector, full compliance with the EU competition rules must be insured. In particular, different pricing must not result in the implementation of dual pricing systems aimed at impeding parallel trade similar or equivalent to the one that the Commission condemned in its GlaxoWellcome Decision of 8 May 2001 (OJ L 302, 17.11.2001). Nevertheless, this would be fully compatible with member state responsibilities for meeting public health expenditure objectives. More generally, the Commission fully supports the G10 Medicines Group's conclusion that, as a matter of principle, medicines which are neither purchased nor reimbursed by the state should be open to full competition.

Key actions

- Member States should remove price controls on manufacturers that prevent full competition of authorised medicines that are neither purchased nor reimbursed.
- Member States should allow the immediate launch of all medicines after the grant of a marketing authorisation.

e) Competitive generic market

The increased use of generic medicines is an important factor in improving the sustainability of health care financing for pharmaceuticals. Health care costs across Europe are rising. Increased use of generic medicines can improve the sustainability of financing. Generic medicines can provide significant savings to healthcare providers, however, their use must be balanced with sufficient incentives to develop innovative products.

The overall generic sector in the European Union is strong but the generic penetration in each national market varies enormously. The sector is particularly strong in UK (18% by value in 2001¹⁶) and Germany (27%). But in other countries such as Spain, Belgium, Portugal, France and Spain the penetration remains very low (3-6%).

As the G10 report makes clear, the reasons for this variation depends on a number of factors in each Member State such as national pricing and reimbursement criteria, prescribing and dispensing practice and incentives to encourage generic use. However, it has highlighted two critical aspects of this issue, intellectual property rights and the need to explore ways of facilitating generic penetration.

Key actions

- Introduction of a "Bolar-type" provision allowing generic testing, as well as the consequential practical requirements, before the end of the patent protection period in order not to delay the introduction of generics on the market after the expiry of the patent;
- Following political agreement in the Council, the introduction of a marketing authorisation application for a generic and to grant this authorisation in the last two years of the data protection period of the reference product for all products except those falling in the mandatory scope of the centralised procedure. This will allow these products to come on to the market immediately after the end of the ten years data protection period;
- Providing a clearer Community definition of generics;
- Introducing greater flexibility for generic producers to supply generic medicines to member states where the reference product is not on their market; and

¹⁶ Figures from various trade associations

- Addressing the issue of biologically similar products by allowing the production of copies of these products by establishing a clearer regulatory scheme.

f) Competitive Non-prescription Market

Non-prescription (or over-the-counter) medicines can be obtained without a medical prescription. Normally they are dispensed in pharmacies but, in some European countries, certain categories of these medicines are available through general retail outlets. The non-prescription market makes up nearly 20%¹⁷ of the total pharmaceutical market in Europe.

Developing the competitiveness of the non-prescription market, with due consideration to issues of safety and affordability to patients, can bring significant benefits to governments and to consumers as well as to industry itself. Although the costs of the medicines are transferred to the consumer, they gain in terms of greater accessibility to the medicines, without the need for a medical consultation beforehand. Accordingly, there are significant time savings to both the consumer and the health professional.

However, self-medication can only succeed if it retains the confidence of both patients and health care professionals. The existing regulatory structure requires that medicines can only be reclassified as non-prescription if they can be made safely available without the supervision of a doctor. In addition, patients must have the support of good quality patient information supplied with the medicine and access to health care advice from professionals such as pharmacists as required.

There is inconsistency in the products which are classified as non-prescription amongst Member States. Greater consistency of classification decisions should be developed in line with the principles of the single market.

The G10 Report also highlighted the issue of the use of trademarks for medicines reclassified to non-prescription status. Developing a new trademark for a non-prescription medicine is expensive and can be a barrier to companies applying for non-prescription status. The use of the same trademark for both the prescription and non-prescription medicines should be allowed where Member States are sure that this presents no risk to public health.

Reclassification of medicines from prescription to non-prescription status is a well established procedure which can bring benefits to patients, healthcare professionals, governments, healthcare systems and industry alike. To encourage reclassification applications, where it is safe to do so, the Commission, through the Pharmaceutical Review, has proposed to allow two years of data exclusivity for a reclassification where significant clinical or pre-clinical data has been submitted with the application. The Council of Ministers has reached a political agreement to reduce this period to one year.

¹⁷ AESGP estimate for 2001

Key actions

- Allow one year data exclusivity on significant clinical or pre-clinical data submitted in support of an application to reclassify a product from prescription to non-prescription;
- Ensure greater consistency of classification decisions by Member States in accordance with the principles of the single market;
- Member States to allow the use of the same trademark after reclassification where there is no risk to public health.

2.3. Strengthening the EU Science Base

Pharmaceutical research is an important engine of innovation and essential to improve the quality and effectiveness of healthcare. It is important that research is carried out in areas considered important by society and ensuring that the research process itself is appropriate to the end use of the medicine in society.

The fragmented nature of European research systems is hindering Europe's ability to compete with the USA in terms of generating, organising and sustaining innovative processes. This not only hinders the EU research effort but is also leading to a loss of our highly skilled scientists.

In recent years, the United States has been more successful in co-ordinating public and private research. Part of the reason for its success has been the impact of the National Institutes of Health (NIH). Through NIH, the United States Government has been able to bring together scientific knowledge and centres of excellence to meet key public health issues while providing public funding.

The key barrier, identified by the G10 Medicines Group, to making Europe a more dynamic centre of research and innovation was the lack of widespread scientific collaboration across national borders and between public and privately funded research. It proposed tackling this issue by establishing European virtual institutes of health combined with greater support for clinical trials and facilitating the development of paediatric and orphan medicines.

Another critical area is biotechnology which is playing an ever greater role in pharmaceuticals. Around one-fifth of new molecular entities launched on the world market are derived from biotechnology¹⁸ and over 50% of those under development are biotech-derived. It is welcome, therefore, that G10 Medicines gave strong support to the *Commission Communication on Life Sciences and Biotechnology*¹⁹.

The completion of the single market, with greater reliance on market measures, would be an important step towards making Europe the most attractive location for R&D. However, more specifically, the Commission plans to take the Group's concept of virtual institutes of health forward through existing programmes as outlined below. In addition, the Commission will reflect further on how Europe can replicate the success of NIH in Europe.

Key Tasks

Virtual Institutes of Health

¹⁸ The Pharmaceutical Industry in Figures 2002. EFPIA

¹⁹ Life sciences and biotechnology – A strategy for Europe COM(2002)27

The objective in creating virtual institutes of health is to stimulate and organise health and biotechnology research in Europe by bringing together researchers with common research interests and goals, from universities, hospitals and research centres throughout Europe. The possible use and development of these centres are being considered in the context of the High Level Process of Reflection on Patient Mobility and Health Care Development in the EU²⁰.

The Commission has a number of initiatives²¹ that could help this concept forward.

The 6th Framework Programme for research (FP6)²².

The main objective of FP6 is to contribute to the creation of the European Research Area (ERA) by improving integration and co-ordination of world class research in Europe. Although the Community budget for research is significant (€17.5 billion), it accounts only 4% of total public resources available for research in Europe. FP6 also aims at providing broad support for the development of world-class human resources in European research by providing measures and incentives to avoid loss of European highly skilled scientists. Other initiatives include:

Increase of Community funds for European research

The Commission recently presented a R&D strategy following the Barcelona European Council of March 2002, with the aim of raising research spending to 3% of the European GPD by 2010 (versus around 1.9% today).

Life Science and Biotechnology Action Plan

The plan suggests a comprehensive set of measures to harvest the potential of biotechnology in Europe and to ensure responsible governance of this process. It aims at developing a skilled and mobile workforce and specific legal competence in biotechnology companies. It supports a strong, harmonised and affordable intellectual property protection system, request measures to strengthen the capital base of the biotech industry and the networking of biotechnology regions in Europe. The new instruments of the Framework Programme for research – integrated projects and networks of excellence - will facilitate the objectives of EU-wide collaborations and attaining critical mass. While Europe has been successful in encouraging a large number of new dedicated biotechnology companies, they are still at a rather early stage of development in terms of size, capitalisation, product pipelines and international co-operation. It is now of high importance that the industry consolidates and develops success stories of more mature and profitable companies and clusters of a meaningful size.

A European Centre for Disease Prevention and Control

The Commission is currently considering the option of setting up such a centre.. Should this proposal be adopted, the centre should become operational no later than 2005. e. According to this proposal the Centre could create a stronger science base for public health in Europe in collaboration with national public health centres in Member States. In this way, it could support and assist clinical research in Europe by consolidating the picture of burden of disease across the Union. As part of the new policy, the related research strand under the 6th Framework Programme for research has called for proposals to strengthen networks and surveillance in the field of communicable diseases research.

Targeting major communicable diseases prevalent in developing countries

²⁰ Council Conclusions of 26 June 2002

²¹ More information on European Union-funded research can be found on: <http://www.cordis.lu/en/home.html>

²²Details of FP6 projects are available at http://europa.eu.int/comm/research/fp6/index_en.html

The Commission will also focus on developing proposals to incentivise R&D for diseases which are currently neglected or where R&D is lacking. Such proposals will include further examination of a number of ideas: venture capital, low-cost loans, tax credits, guaranteed markets and the extension of patent rights and/or market exclusivity including through the relationship which might be established between different products²³.

Key actions

- The 6th Framework Programme for research (FP6) including the Life Sciences, Genomics and Biotechnology for Health programme with a budget of more than €2.2 billion for the period 2002-2006.
- The ERA NET which aims to support the co-operation and co-ordination of existing public funded research activities carried out at national or regional level in the Member States.
- Increase research spending to 3% of GDP in the EU by 2010 in line with the R&D strategy agreed at the Barcelona European Council in March 2002
- Implementation of the Biotechnology Strategy Action Plan
- Reflection on the proposal to establish a European Centre for Disease Prevention and Control

Incentives for Research

Clinical trials are critical to pharmaceutical research. They are vital to public and health and represent a considerable investment for the pharmaceutical industry. Clinical trials usually begin around 6 years after the start of product development and after a third of the budget for development has already been spent.

G10 Medicines has rightly stressed the need for better co-ordination between Member States. All clinical trials in the EU, under Directive 2001/20/EC (Clinical Trials), must be conducted in accordance with the principles of Good Clinical Practice (GCP) which require that the well-being of patients is the paramount consideration in trial design. The Directive also recognises the need for better European co-ordination. It simplifies and harmonises governing administrative procedures to allow for better co-ordination of trials within the Union. It also contains a provision setting up, for the first time, a European clinical trials database. The database is designed to help communication between regulatory authorities to enable them to improve their oversight of trials and provide for enhanced protection of patients. The Commission is currently preparing detailed guidance on the GCP and the database.

The Commission has recognised that the regulatory framework on clinical trials needs to be adapted to ensure that it facilitates trials where the potential pool of clinical trial subjects is small in particular with orphan medicines and for paediatric indications. Much has already been achieved in the area of orphan medicines with the adoption of Regulation 141/2000/EC which provides a number of incentives to produce orphan drugs including 10 year marketing exclusivity, fee waivers and provision of scientific advice. The result has been 140 designations for new orphan medicines through the EMEA's Committee for Orphan Medicinal Products²⁴, since the entry into force, in 2001, of the Regulation. The Commission will monitor the impact of this regulation to ensure that it delivers significant public health benefits. In Spring 2002 the Commission also launched a new proposal to provide the

²³ See the Programme for Action on Communicable Diseases (COM(2003)93)

²⁴ This accounts for over 50% of all approvals through the Agency.

framework to encourage the development of paediatric medicines (*better medicines for children*²⁵).

The Commission's Life Science and Biotechnology Action Plan aims to reinforce research in a number of ways. Some of these have been mentioned previously however, there are two issues of particular importance to the pharmaceutical sector. Firstly, it calls for the rapid implementation of the Directive on the Legal Protection of Biological Inventions by all Member States. Eight Member States have yet to implement the Directive and the Commission has begun infringement proceedings against those countries. Unless it is properly implemented throughout the Union the European biotech industry will fall further and further behind. The directive provides a robust European system for protecting biotech inventions which is vital if European biotechnology is to continue to thrive.

Secondly, it calls for the adoption of the Community patent-legislation. The Commission welcomes the recent common political approach²⁶ agreed by Member States on the Community Patent. The proposed Community Patent will automatically give coverage over the whole EU at a considerably reduced cost than is required to acquire individual patents in each member state at the moment. The Community Patent holder would also benefit from a single system of litigation. Again this will help to strengthen the EU as a centre for research.

Key actions

- The setting up a Clinical Trials Database and adoption of guidelines for implementing the Directive.
- Facilitate EU dialogue to help Member States with implementation of the Directive.
- Follow the consultation on *better medicines for children* with regulatory proposals to provide the framework and incentive to encourage the development of paediatric medicines.
- Facilitate research into orphan medicines by taking actions on rare diseases under the new Public Health Programme. The objective will be to develop research capacity and scientific support for rare diseases research.
- To use the recently created *Competitiveness in Biotechnology Advisory Group* to identify issues affecting European competitiveness in biotechnology.
- Member States to rapidly implement the Directive on Legal Protection of Biological Inventions (EC/98/44).
- Council to adopt the Community Patent legislation.

2.4. Medicines in an enlarged European Union

The enlargement of the Union will create major opportunities and challenges. One major challenge will be the integration of the economies and healthcare systems of the new Member States into the existing Union. Health status in the Accession countries, as reflected in morbidity and mortality statistics, is generally lower than the rest of the EU. At the same time, most of the countries joining the Union have fewer resources to spend in their health care sectors than the existing Member States. Within this broad context, the availability and affordability of pharmaceuticals are important issues which need to be addressed in the context of support to their public health care systems. Due to the later introduction of patent

²⁵ *Better Medicines for Children* available on <http://pharmacos.eudra.org>

²⁶ Competitiveness Council 3 March 2003

laws in some of the new Member States, different levels of intellectual property (IP) protection and, therefore, significant differences in price levels, will be found and this could lead to an increase in parallel imports.

It has always been recognised that, for a limited period after accession, some medicines on the market in the new Member States would not have the same level of IP protection found in the existing Member States. The Accession Treaties were, therefore, amended to include a transitional period to the full application of the principle of the free movement principle to prevent the parallel import of pharmaceutical products that lack equivalent IP right protection. A mechanism is also being introduced whereby parallel importers have to provide confirmation to the competent authority of a member state that they have informed the patent holder of an application for a parallel import authorisation. However, the legal responsibility for enforcing intellectual property rights will remain with the patent holder. The Commission will reflect on whether guidelines in this area are required.

In addition, under the pharmaceutical review, there will be given a statutory requirement for parallel importers to inform both the marketing authorisation holder and the competent authorities (in the Member States and, for the Centralised Procedure, the EMEA) of their intention to proceed with a parallel import in a given member state.

These measures will help tackle problems of varying levels of IP protection even if they do not address concerns over differences in price levels. Parallel importation of medicines can provide Member States with significant cost savings but, at the same time, there is also a risk that the significant differences in prices could lead to shortages of supply of key medicines in certain Member States (new and existing) if they are systematically re-exported to countries that pay higher prices for medicines.

The legal take over by the new Member States of the Community *acquis* in the pharmaceutical sector, has been accompanied by a practical assistance to the new Member States to prepare for accession through the Pan European Regulatory Forum²⁷ (PERF). Under the umbrella of the PHARE Programme, PERF provides the opportunity for the new Member States to have a preventive dialogue with the Commission on difficulties they are experiencing in implementing the pharmaceutical legislative framework. This preventive dialogue could be continued after enlargement by regular meetings to examine the implementation of the Community provisions by these authorities.

²⁷ Further details available on “<http://perf.eudra.org/>”

Key Actions

- Implementation of the specific mechanism, foreseen in the Accession Treaties, on parallel imports from accession countries.
- Introduce a statutory requirement in the Pharmaceutical Review, for parallel importers to inform both the MA holder and the competent authorities of its intention to proceed with a parallel import in a given member state.
- The Pharmaceutical Review will allow generic supply of medicines in member states where there is no reference product on the market, and help to alleviate problems of availability in the new member states.
- Full use of the legal provisions concerning *well established use* and new legislation on traditional herbal medicines will clarify the legal basis on many existing products.
- The Commission to consider the impact of enlargement in implementing all the G10 recommendations. This is a key objective of the pharmaceutical review. This has been supplemented by providing practical help to the new member states to prepare for accession through the Pan European Regulatory Forum (PERF).
- All accession countries have been eligible to take part in the new public health programme since its start in 2003.

2.5. Member States learning from each other

The G10 Medicines Group were asked to recommend ways to improve the performance of the pharmaceutical industry in terms of its industrial competitiveness and its contribution to social and public health objectives. To measure progress towards these objectives, the Group recommended the development of a set of EU indicators to cover both industry competitiveness and public health objectives. To achieve it required having access to high quality and updateable data in a range of areas which limited the indicators that could be selected. The exercise must therefore be linked to current initiatives to develop comparable pharmaceutical data for public health across the European Union. These include ongoing work under the Health Monitoring Programme (1998 – 2003), and activities planned by Eurostat as part of their development of a Systems of Health Accounts.

Competitiveness

Benchmarking is no solution to the problems of competitiveness in itself, however, it will, for the first time, establish a set of agreed EU performance indicators that will provide a comprehensive and objective basis for measuring the implementation of the recommendations and to exchange best practice. To take forward work on these, the Commission has already established a working group to develop competitiveness indicators. The indicators are set out in Annex B and are also available on the G10 Medicines website (<http://pharmacos.eudra.org>). The number of indicators have been kept to a minimum in the interests of management of the exercise and to maintain the focus on critical areas. This represents a first start with, in some cases, raw data that needs significant further refinement. The real benefit of these indicators will only be realised as the Commission develops data over a number of years and allowing for a proper analysis.

The indicators cover 4 broad areas: Supply, Demand & Regulatory Framework, Industry Outputs & Macroeconomic Factors and have been divided into headline and supporting indicators.

Supply

The picture in this area is mixed. The relative total venture capital invested in European and candidate countries is highly variable. All European countries invested relatively lower levels of venture capital than the US although average rates are above Japan and Switzerland. In terms of Government funding in health R&D, the message is stark; in 2000 the US invested nearly 5 times more than the EU. Most European countries invest less than 0.1% of GDP into health R&D compared to 0.19% in the US.

Demand and the Regulatory Framework

The indicators confirm there is a wide variety in market shares/values of the innovative, generic and self-medication sectors within the EU and shows that the US has a vibrant market in both new molecular medicines and generics. In terms of access to the market, overall, medicines appear more quickly in the market in the US than elsewhere. Part of the reason for this is due to the fact that the American federal government does not set, nor regulate, the price manufacturers can charge for medicines. Other factors involved are the length of the regulatory process and company strategy concerning the launch in a particular market.

Industry Outputs

The indicators show clearly that although R&D expenditure has grown steadily in the EU over the last decade, the expenditure US has grown rapidly and by 1997 had overtaken that of the EU. However, the effectiveness of this expenditure remains below that of Germany, the UK, the Netherlands and Spain.

Macroeconomic factors

The indicators show that the European-based industry remains a powerful sector. All the major pharmaceutical producing nations within the EU enjoy a positive trade balance with the US. Nearly €90 billion of pharmaceuticals were exported by EU countries in 2001. Employment levels have remained relatively stable during the 1990s in both the EU and the US. Europe is still the most significant source for employment for the industry with a workforce over twice that of the US.

Public Health

There are a number of challenges to developing a set of indicators that can monitor the role of the pharmaceutical industry in preventing and treating disease. While industry has clearly made a major contribution to public health in a number of areas, it is difficult to quantify in global terms and in terms of individual products, and for specific diseases. This is because a number of factors contribute to changes in health outcomes at the individual and population level, such as genetic and environmental factors and the knowledge and behaviour of health care actors such as the prescribing physician and the patient. For this reason, the Commission proposes to take a broad approach to the G10 recommendation. The indicators could cover not only the performance of pharmaceutical products, but also performance issues related to the health care prescriber.

The Commission is actively pursuing ways to develop robust, easily understandable indicators. One kind of indicator might be constructed in terms of the availability of pharmaceutical products, compared to other health care inputs, within priority disease areas and the significance of available medicines, for example in terms of their effectiveness, as well as the identification of those areas where there is currently no effective pharmaceutical response. Another could focus on rational use and prescribing at the health professional and patient level. A third focus could be on the development of indicators around patient quality issues such as the acceptability of medicines to patients.

Supporting the work of G10 Medicines

To facilitate the work of G10 the Commission will support, where appropriate, relevant events which have been organised in connection with G10 objectives.

Key actions

- The Commission will publish annual tables of competitiveness indicators. They will be a dynamic tool which can easily be adapted in the light of experience and new developments (e.g. enlargement). They would also provide a basis to help inform discussion in Council, the European Parliament and in national and international conferences.
- The Commission will undertake work under the Public Health Programme to develop a broad range of public health indicators. The results will be used as a basis for discussion and consultation with a range of stakeholders in 2004. This exercise will also consider the availability and quality of data in relation to the proposed indicators so that a judgement can be reached on the final choice of relevant and feasible indicators.
- The Commission will support on an annual basis meetings to supplement the Communication and to verify progress on key actions for example; the use of generics.

3. CONCLUSION

The retention of a dynamic and thriving EU-based pharmaceutical industry, that embraces and develops new technologies such as biotechnology, is a critical requirement for meeting our high level and challenging economic, social and public health goals. It will help us achieve the strategic goal, set by the March 2000 European Council in Lisbon, for the EU to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. To accomplish this the EU must act on the warnings of falling competitiveness the Commission is receiving.

Equally, the pharmaceutical sector is a central component of health care systems and public health. The Commission, together with Member States, must provide the right conditions for patients to be able to take an active role in their own healthcare by providing them with the appropriate information to be able to do this effectively and safely. They must meet the needs of patients, for safe, effective and high quality treatments. Together the Commission and Member States must embrace the new technologies, such as biotechnology, and the new forms of communication, especially the Internet. Finally, the Commission and Member States must be prepared to reap the benefits, and face the challenges, of Enlargement.

The proposals set out in this Communication provide the building blocks for achieving these objectives. Action at both an European and national level is critical to success. Furthermore, it is important that implementation respects the balance between competitiveness and public health objectives established by the original G10 Report. With this in mind the Commission proposes the following post-G10 measures:

Benchmarking follow-up

The benchmarking exercise is the first tangible result of G10 Medicines. It will provide a mechanism to regularly check the strength of the European-based pharmaceutical industry and the impact it is having on European public health. The performance indicators will also support the exchange of best practice between Member States.

For this to be effective the indicators need to be regularly updated and easily accessible. The Commission will update the indicators annually and invites the Council and the European

Parliament to regularly discuss them. The use of performance indicators is intended to be a dynamic process. They will be adapted to include data on the new Member States as soon as it is available and changed to focus on other issues as appropriate. The Commission will set up a small secretariat to take forward the benchmarking exercise and other G10 Medicines-related work.

Future of G10 Medicines

The G10 Medicines Group has served a useful purpose, in particular, by serving as a catalyst for ideas and building links between stakeholders. Its report with its wide-ranging recommendations must now be taken forward by all parties involved. The terms of reference for G10 Medicines say that it must be a time-limited exercise. The G10 Medicines Group will therefore continue until the enlargement of the Union in May 2004. This will allow the existing members to monitor the response of the Council, the European Parliament and other institutions to the Communication.

Maintaining the momentum of G10

Improving EU pharmaceutical industry competitiveness and public health is a substantial exercise and it is essential that there is a comprehensive, but light-touch, mechanism for monitoring progress. The benchmarking exercise will be led by the Commission in co-operation with Member States. In light of this the Commission would like Member States, on a voluntary basis, to communicate national measures (legislative and non-legislative), that could have an impact on G10 Medicines-related issues such as pricing and reimbursement. All notified measures would be shared with other Member States to improve transparency.

The critical objective is to maintain momentum to ensure that the G10 Medicines initiative, which has already done a great deal to raise awareness of the current situation in the pharmaceutical sector, has a mid- and long-term impact. In particular, to involve the Council and the European Parliament in the process. The success of G10 will be measured on this basis and this depends on ensuring involving and maintaining member state commitment to the process.

The Commission now invites the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, together with other stakeholders, to take forward the key actions highlighted in this Communication with the objective of enhancing the competitiveness of the pharmaceutical industry in the context of achieving high level EU public health objectives.

Annex A
Summary of Recommendations and Implementing Actions

Recommendation 1: Benchmarking: Competitiveness and Performance

The development by the Commission of a comprehensive set of indicators covering:

- the performance of the pharmaceutical industry in relation to indicators of industrial competitiveness;
- and the prevention and treatment of diseases and emerging health threats with reference to data on morbidity and mortality, including the performance of products; and
- the relationship between the various EU and Member State regulatory structures (licensing, pricing and reimbursement) and availability (time to licence, time to market) access and uptake of pharmaceuticals

Implementing Actions

- 1.1. The Commission will publish annual tables of competitiveness indicators. They will be a dynamic tool which can easily be adapted in the light of experience and new developments (e.g. enlargement). They would also provide a basis to help inform discussion in Council, the European Parliament and in national and international conferences.
- 1.2. The Commission will further undertake work under the Public Health Programme to develop a broad range of public health indicators. The results will be used as a basis for discussion and consultation with a range of stakeholders in 2004. This exercise will also consider the availability and quality of data in relation to the proposed indicators so that a judgement can be reached on the final choice of relevant and feasible indicators.
- 1.3. The Commission will support on an annual basis meetings to supplement the Communication and to verify progress on key actions for example; the use of generics.

Implementers: The Commission & Member States

Timeframe: 2003-2006

Recommendation 2: Access to Innovative Medicines

To secure the development of a competitive innovative-based industry:

- a) that the European Institutions should, as part of the review of Community pharmaceutical legislation now underway, consider ways of improving the legislation or the operation of the licensing system to improve the introduction to the market in particular for innovative medicines; and
- b) that the European Institutions and Member States should improve the use of telematics to facilitate the operation of the Community regulatory system.

Implementing Actions

- 2.1. A fast track assessment procedure for medicines that are of major public health interest. The statutory time limit for assessing these marketing authorisation applications will be reduced from 210 – 150 days.
- 2.2. Shortening of the decision-making procedure, after scientific evaluation,
- 2.3. Widening the scope of the Centralised Procedure to include all new medicines indicated for HIV/AIDS, cancer, neuro-degenerative diseases and diabetes to contribute to the goal of giving all European patients access to important medicines.
- 2.4. Improve the functioning of both the Centralised and the Mutual Recognition Procedures to complete the single market in pharmaceuticals.
- 2.5. Data exclusivity, through the Pharmaceutical Review, to be harmonised at 10 years for all products to bring it into line with the annual protection awarded under the Centralised Procedures. In order to promote research on new therapeutic indications with a significant clinical benefit an extra year of data protection should be granted for such indications.
- 2.6. Together with Member States support the EMEA to successfully manage and complete projects under the Telematics Strategy.

Implementers: The Commission & Member States

Timeframe: 2003–2006

Recommendation 3: Timing of Reimbursement and Pricing Decisions

Respecting national competence, Member States should examine the scope for improving time taken between the granting of a marketing authorisation and pricing and reimbursement decisions in full consistency with Community legislation. To do this with a view to securing greater uniformity and transparency between markets and rapid access of patients to medicines.

Implementing Actions

- 3.1. Member States to examine their existing pricing and reimbursement systems to ensure that they operate fully in accordance with the Transparency Directive
- 3.2. The Commission and Member States should, as a priority, examine the scope for improving time taken between granting of a marketing authorisation and pricing and reimbursement decisions in order to reduce this time to the absolute minimum.
- 3.3. The Commission will, in parallel, launch a reflection on finding alternative ways of controlling national health care expenditures including the option of letting manufacturers set the prices of new products, while negotiating appropriate safeguard mechanisms for Member States to contain expenditure in compliance with EU competition rules.
- 3.4. Under the 6th Framework Programme, research will be undertaken on comparing member states' health costs at individual service level and on performance assessment of health care institutions

Implementers: Member States

Timeframe: 2003 - 2006

Recommendation 4: Competitive Generic Market

Implementing Actions

To secure the development of a competitive generic market in Europe, that:

- a) the European Institutions to agree a way forward on intellectual property rights issues (especially data exclusivity and Bolar) covered in the Commission's proposed legislation.
- b) Member States – facilitated by the Commission - explore ways of increasing generic penetration in individual markets (including generic prescribing and dispensing). Particular attention should be given to improved market mechanisms in full respect of public health considerations

Implementing Actions

- 4.1. Introduction of a "Bolar-type" provision allowing generic testing, as well as the consequential practical requirements, before the end of the patent protection period in order not to delay the introduction of generics on the market after the expiry of the patent;
- 4.2. Following political agreement in the Council, the introduction of a marketing authorisation application for a generic and to grant this authorisation in the last two years of the data protection period of the reference product for all products except those falling in the mandatory scope of the centralised procedure. This will allow these products to come on to the market immediately after the end of the ten years data protection period;
- 4.3. Providing a clearer Community definition of generics;
- 4.4. Introducing greater flexibility for generic producers to supply generic medicines to member states where the reference product is not on their market; and
- 4.5. Addressing the issue of biologically similar products by allowing the production of copies of these products by establishing a clearer regulatory scheme.

Implementers: The Commission

Timeframe: 2003 - 2006

Recommendation 5: Competitive Non-prescription Market

To meet public health objectives in Member States and to secure the development of a competitive non-prescription medicines' market in the EU (respecting that the reimbursement of medicines remains in the Member States' competence) by:

- a) reviewing, with full respect to health criteria, and, if appropriate, amending mechanisms and concepts for moving medicines from prescription to non-prescription status; and
- b) allowing the use of the same trademark for products moved to non-prescription status

Implementing Actions

- 5.1. Allow one year data exclusivity on significant clinical or pre-clinical data submitted in support of an application to reclassify a product from prescription to non-prescription;
- 5.2. Ensure greater consistency of classification decisions by Member States in accordance with the principles of the single market.
- 5.3. Member States to allow the use of the same trademark after reclassification where there is no risk to public health.

Implementers: The Commission & Member States

Timeline: 2003-2006

Recommendation 6: Full Competition for Medicines neither Purchased nor Reimbursed by the State

That the Commission and Member States should secure the principle that a Member State authority to regulate prices in the EU should extend only to those medicines purchased by, or reimbursed by, the State. Full competition should be allowed for medicines not reimbursed by State systems or medicines sold into private markets.

Implementing Actions

- 6.1. Member States should remove price controls on manufacturers that prevent full competition of authorised medicines that they neither purchase nor reimbursed.
- 6.2. Member States should allow the immediate launch of all medicines after the grant of a marketing authorisation.

Implementers: Member States

Timeframe: 2003 2006

Recommendation 7: Relative Effectiveness

- | | |
|----|--|
| a) | The Commission should organise a European reflection to explore how Member States can improve ways of sharing information and data requirements to achieve greater certainty and reliability for all stakeholders, even if the decisions they take may differ |
| b) | The objective is to foster the development of health technology assessment (HTA), including clinical and cost effectiveness, in the Member States and the EU. Furthermore, to improve the value of HTA, to share national experiences and data while recognising that relative evaluation should remain a responsibility of Member States. |

Implementing Actions

- | | |
|------|---|
| 7.1. | Provide a forum for member states to generate and share information on common relative effectiveness issues in the context of pricing and reimbursement decisions. A working group of member states has been established, within the framework of the Transparency Committee, to develop, eventually, common methodologies for the assessment of relative effectiveness. The group will: |
| 7.2 | Take stock of which member states rely on a comparison between different products in deciding their price or reimbursement, what is exactly compared, methodologies currently used by member states in their assessment of relative therapeutic value, frequency of assessments, information on which the comparison is based, by whom is the assessment carried out and in what manner. |
| 7.3 | Consider to what extent there are currently common themes in national approaches to relative therapeutic value and what individual practices might be of general relevance in other member states |
| 7.4 | Consider extending the stock-taking exercise to national cost-effectiveness programmes if the above approach has proved to be of value. |
| 7.5. | Develop further projects as part of the new public health programme to strengthen evaluation of ATV. This could include the development of ways to share information to health professionals and to patients, in collaboration with other European bodies. |
| 7.6. | The Commission will take forward work on health technology assessment under the new Public Health Programme (2003-2008). Proposals are being sought in relation to developing mechanisms to bring together competent authorities in the EU and applicant countries, and where applicable, other stakeholders with the aim of enabling them to co-operate more closely in health technology assessment. This topic is also being pursued under the High Level Process of Reflection on Patient Mobility and Health Care Development in the EU. |
| 7.7. | The Commission will ensure coherence to prevent any duplication of activities between the work of the Transparency Committee and the Public Health Programme |

Implementers: Member States & the Commission

Timeframe: 2003 - 2008

Recommendation 8: Virtual Institutes of Health

The creation of the European virtual institutes of health, connecting all existing competence centres on fundamental and clinical research into a European network of excellence

Implementing Actions

- 8.1. The 6th Framework Programme for research (FP6) including the Life Sciences, Genomics and biotechnology for health programme with a budget of more than €2.2 billion for the period 2002-2006.
- 8.2. The ERA NET which aims to support the co-operation and co-ordination of existing publicly funded research activities carried out at national or regional level in the Member States.
- 8.3. Increase research spending to 3% of GDP in the EU by 2010 in line with the R&D strategy agreed at the Barcelona European Council in March 2002
- 8.4. Implementation of the Biotechnology Strategy Action Plan
- 8.5. Reflection on the proposal to establish a European Centre for Disease Prevention and Control.

Implementers: The Commission and Member States

Timeframe: 2003 - 2010

Recommendation 9: Incentives for Research

To improve the co-ordination of Community and national activities, by:

- a) Commission and Member States co-ordinate and support the conduct of clinical trials on a European scale, establish a database of trials and clinical research results;
- b) Commission and Member States put in place an effective policy in terms of incentives to research and support the development and marketing of orphan and paediatric medicines;
- c) Supporting the development of a biotechnology strategy in Europe

Implementing Actions

- 9.1. The setting up of a Clinical Trials Database and adoption of guidelines for implementing the Directive.
- 9.2. Facilitate EU dialogue to help Member States with implementation of the Directive.
- 9.3. Follow the consultation on *better medicines for children* with regulatory proposals to provide the framework and incentive to encourage the development of paediatric medicines.
- 9.4. Facilitate research into orphan medicines by taking actions on rare diseases under the new Public Health Programme. The objective will be to develop research capacity and scientific support for rare diseases research.
- 9.5. To use the recently created *Competitiveness in Biotechnology Advisory Group* to identify issues affecting European competitiveness in biotechnology.
- 9.6. Member States to rapidly implement the Directive on Legal Protection of Biotechnological Inventions (EC/98/44).
- 9.7. Council to adopt the Community Patent legislation.

Implementers: The Commission & Member States

Timeframe: 2003 - 2006

Recommendation 10: Enhanced Information

- | | |
|----|--|
| a) | The restriction on advertising of prescription medicines to the general public should continue; |
| b) | There should be no restrictions on advertising of non-prescription and non-reimbursed over-the-counter medicines in line with existing requirements for advertising to encourage the rational use of the product and not to be misleading. There should be sharing of information and development of common approaches to regulation of such advertising; |
| c) | Consideration should be given by the European Institutions, as part of their current review of the pharmaceutical legislation, to: <ul style="list-style-type: none">– in co-operation with all stakeholders to produce a workable distinction between advertising and information that would allow patients actively seeking information to be able to do so, and to develop standards to ensure the quality of such information; and– to the establishment of a collaborative public-private partnership involving a range of interested parties. The information should be carefully piloted and evaluated to assess the extent to which it meets the needs of patients with these conditions. |

Implementing Actions

- | | |
|-------|---|
| 10.1. | A major component of the new public health programme will be to establish an information and knowledge system. This will give rise to extensive dissemination of information concerning all aspects of public health. A European Health Portal is being developed in order to disseminate this information to health authorities, professionals, citizens and patients alike. In areas of national competence, ways will be sought to provide links from the EC Health Portal to national health sites. |
| 10.2. | The Commission will explore, with stakeholders, a range of approaches to provide a realistic and practical framework for the provision of information on prescription and non-prescription medicines. |
| 10.3. | The prohibition on advertising prescription medicines to the public will remain. However, non-prescription medicines will continue to be advertised to the public in full respect of the general requirements for honest, truthful and not misleading advertising. |
| 10.4. | Competent authorities hold substantial information on medicines and much of this is of significant interest to health professionals and the general public. It is important that this is made widely available and the Commission, involving the EMEA, will be pro-active in encouraging the Member States to share this information with a wider group of stakeholders, including the general public. |
| 10.5. | The newly created European Patients Forum (see Recommendation 13) also provides a mechanism to consider patient's needs in relation to information and how these can be best met. |

10.6. To increase public confidence in patient information on medicines, the Commission will reflect on establishing a collaborative Public Private Partnership involving a range of interested parties including representatives from public authorities, industry, health funds, health care professionals and patient groups. It could take the form of a small body that would be able to advise and monitor the quality of the information already provided and produce guidelines in specific areas to support the work of national and Community regulatory authorities.

Implementers: The Commission & Member States

Timeframe: 2003 - 2006

Recommendation 11: Patient Information Leaflets

In the context of the current review of Community legislation, the legislation relating to patient information leaflets should be reviewed taking into account views of users as well as regulators and industry.

Implementing Actions

- 11.1. The Commission through the Pharmaceutical Review is proposing a re-ordering of the information in the patient information leaflet to improve their comprehensibility;
- 11.2. The introduction of mandatory readability testing of leaflets;
- 11.3. The EMEA is undertaking a project, with patient organisations, to consider new ways of ensuring that information on medicines takes more account of patient needs.

Implementers: The Commission

Timeframe: 2003 - 2006

Recommendation 12: Pharmacovigilance

That systems for post-marketing surveillance should be optimised to ensure that co-ordinated processes are in place to gather data on adverse events and patient safety.

Implementing Actions

- 12.1. Enhance the pharmacovigilance role of the EMEA
- 12.2. Establish the framework conditions, and increase the frequency, of pharmacovigilance reporting for new medicinal products; and
- 12.3. Further develop the EudraVigilance database of safety information relating to all medicines on the market in the EU.

Implementers: The Commission and Member States

Timeframe: 2003 - 2006

Recommendation 13: Funding of Patient Groups

That the Commission consider providing core funding for European patient groups to enable them to participate independently in the debate and decision making on health matters in the EU

Implementing Actions

- 13.1. To make available, under the new Public Health Programme, funding for the patient and other public health organisations for networking activities at an EU level and projects on patient information within the priorities set by the programme decision and the annual work programme.
- 13.2. To encourage the patients' groups, including the Patients' Forum, to take forward work to define patients' needs in relation to issues of information, and to explore more generally the role of the patient in health systems, and to ensure that patient rights are properly considered in future policy developments.
- 13.3. Patients' organisations will have access to the information disseminated through the public health portal systems under development in the Public Health Programme.

Implementers: The Commission & patient groups

Timeframe: 2003 - 2008

Recommendation 14: Enlargement

That the implementation of the above recommendations should take full account of the future enlargement of the EU. In particular, rules should recognise the differences between public health, marketing and economic conditions between existing Member States and the accession countries, to that extent, a derogation governing parallel imports should be included in the accession treaties.

Implementing Actions

- 14.1. Implementation of the specific mechanism foreseen in the Accession Treaties on parallel imports from Accession Countries.
- 14.2. Introduce a statutory requirement in the Pharmaceutical Review, for parallel importers to inform both the MA holder and the competent authorities of its intention to proceed with a parallel import in a given member state.
- 14.3. The Pharmaceutical Review will allow generic supply of medicines in member states where there is no reference product on the market, and help to alleviate problems of availability in the new Member States .
- 14.4. Full use of the legal provisions concerning *well established use* and new legislation on traditional herbal medicines will clarify the legal basis of many existing products.
- 14.5. The Commission to consider the impact of enlargement in implementing all the G10 recommendations. This is a key objective of the pharmaceutical review. This has been supplemented by providing practical help to the new member states to prepare for accession through the Pan European Regulatory Forum (PERF).
- 14.6. All accession countries have been eligible to take part in the new public health programme since its start in 2003.

Implementers: Member States & the Commission

Timeframe: 2003 - 2006

Annex B Benchmarking

List of main indicators

1. Venture capital invested
2. Government funds for Health R&D
3. Market share for new molecular entities launched in the last 5 years
4. Market share of generics
5. OTC as a percentage of total sales
- 6a. Time from approval to launch
- 6b. Time from approval to launch Time from pricing and/or reimbursement application to reimbursement
7. R&D spending and productivity
8. Trade balance
9. Pharmaceutical industry employment

Indicator 1. Venture capital invested

Total venture capital investment in European and candidate countries is highly variable. All European countries invest lower levels of venture capital than the US although average EU rates are above Japan.

Among the high tech sectors relative investment in health/biotechnology tends to be lower than in communications or information technology. Relative investment in this sector in the US is ahead of all EU countries.

Venture Capital invested in health and biotechnology

Euros (million)

	1995	1996	1997	1998	1999	2000	2001
United States	904	1.697	3.377	3.033	3.740	6.847	
European Union	415	419	655	981	1.561	3.702	2.408
United Kingdom	259	211	412	390	595	1.987	679
France	67	69	72	199	155	304	280
Germany	16	59	61	222	378	749	736
Italy	4	7	14	6	22	83	20
Sweden	6	3	2	47	191	178	193
Netherlands	43	37	45	67	77	110	63
Spain	1	2	11	9	22	65	168
Switzerland	6	5	7	31	74	49	21
Belgium	10	16	25	8	68	53	84
Finland	5	5	5	21	31	66	49
Norway	1	1	3	8	11	14	41
Denmark	3	2	4	7	9	79	109
Ireland	0	3	3	1	3	13	5
Greece	0	4	0	0	6	1	7
Portugal	2	0	1	0	1	1	1
Austria	0	0	1	3	4	13	14
Japan	13	24	19	15	40	54	

Source OECD

1) Definitions of health and biotech venture capital are as follows:

For the Asian countries (including Australia and New Zealand), Medical/Biotechnology refers to (1) Health science (2) Doctors and services (3) Drugs -OTC/prescription (4) Pharmaceuticals (5) Hospital management (6) Home healthcare (7) Diagnostic/therapeutic products

For the USA, in 2001, Biotechnology refers to (1) Human biotechnology (2) Agricultural/animal biotechnology (3) Industrial biotechnology (4) Biosensors (5) Biotech related research & production equipment (6) Biotech related research & other services (7) Other biotechnology related. Medical/Health related refers to (1) Medical diagnostics (2) Medical therapeutics (3) Medical/health products (4) Medical/health services (5) Pharmaceuticals

According to the EVCA (Yearbook), which is the source of data for European countries: Biotechnology refers to (1) Agricultural/animal biotechnology (e.g. plant diagnostics) (2) Industrial Biotechnology (e.g. derived chemicals) (3) Biotechnology related research and production equipment. Medical/Health Related refers to (1) Healthcare (2) Medical instruments/devices (e.g. diagnostic and therapeutic equipment) (3) Pharmaceuticals (e.g. drug development).

Indicator 2. Government funds for Health R&D

Most European governments invest less than 0.1 percent of GDP into health R&D, this compares to the US figure of 0.19%.

In 2000 US invested nearly five times more in health R&D than the fourteen EU countries for whom figures are available.

The EU budget allocated for life sciences (genomics and biotechnology for health) in the 6th Research Framework Program amounts to € 2,255 million for the period 2003-2006, i.e. € 564 million per year on average.

Health research and development in government budget (GBAORD) ¹⁾, as a percentage of GDP and Euros 2000

	% GDP	mn Euros PPP
Austria	0,0142%	33,95
Belgium (1999)	0,0080%	23,14
Denmark	0,0136%	23,98
Finland	0,0681%	89,22
France (1999)	0,0528%	815,35
Germany	0,0270%	603,58
Greece (1999)	0,0139%	35,43
Ireland (1999)	0,0084%	9,66
Italy (1998)	0,0322%	596,09
Netherlands (1999)	0,0294%	142,26
Portugal	0,0341%	96,04
Spain (1999)	0,0289%	304,35
Sweden	0,0101%	25,16
United Kingdom (1999)	0,1048%	1.729,73
Slovak Republic	0,0200%	14,28
Japan	0,0253%	944,04
Norway	0,0545%	83,83
Switzerland (1998)	0,0026%	6,44
United States	0,1885%	20.988,35

1. Government budget appropriations or outlays for R&D.

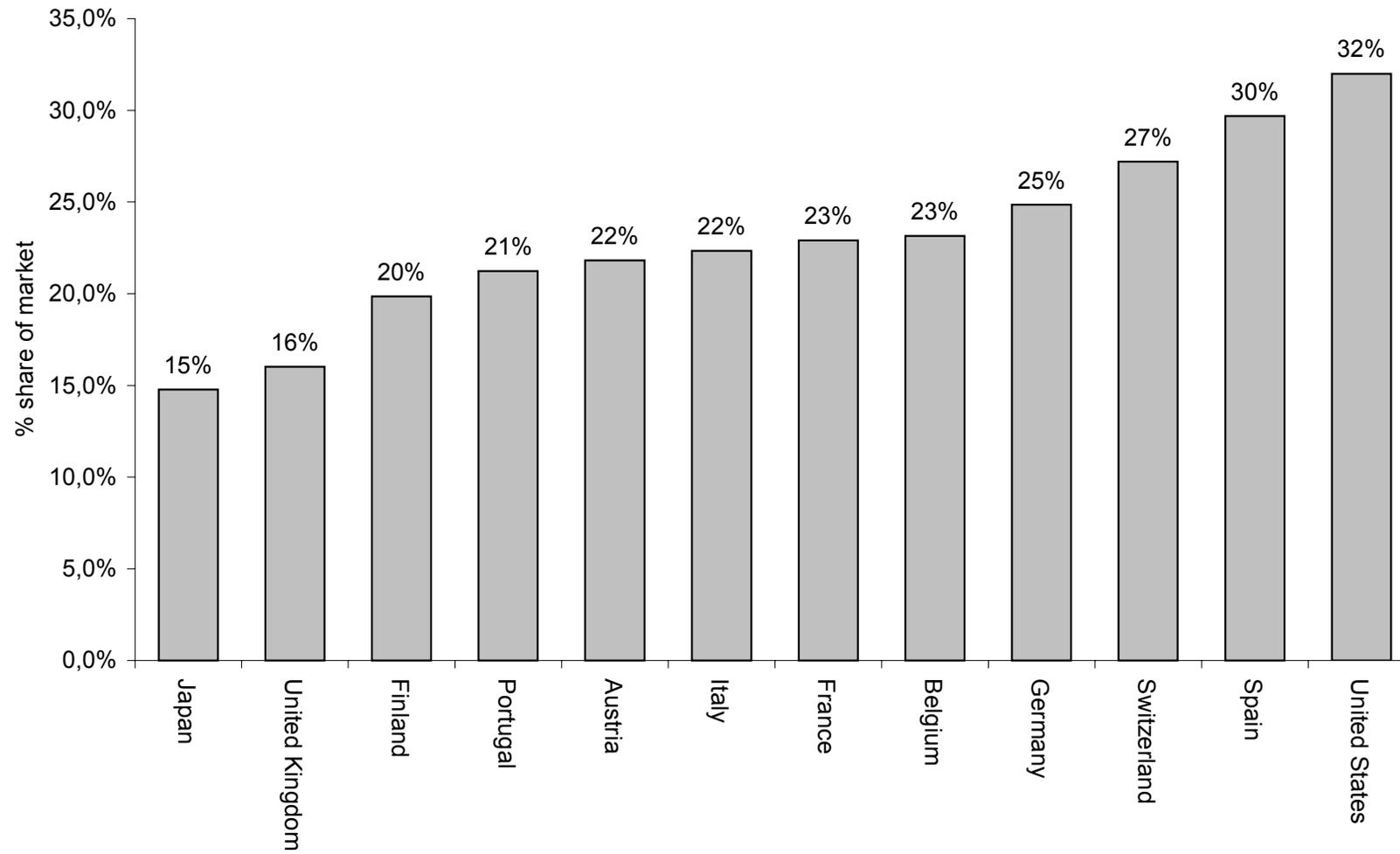
Source: OECD Science, Technology and Industry Scoreboard 2001. From OECD, R&D database, May 2001.
Source of GDP and PPP data, OECD Health Data 2002.

Indicator 3. Uptake of new medicines

This indicator shows the percentage, by value of national pharmaceuticals markets accounted for by new molecular entities launched within the last 5 years at 2001.

Source : IMS Health

Share of market for new products launched in previous five years 2001 Indicator 3



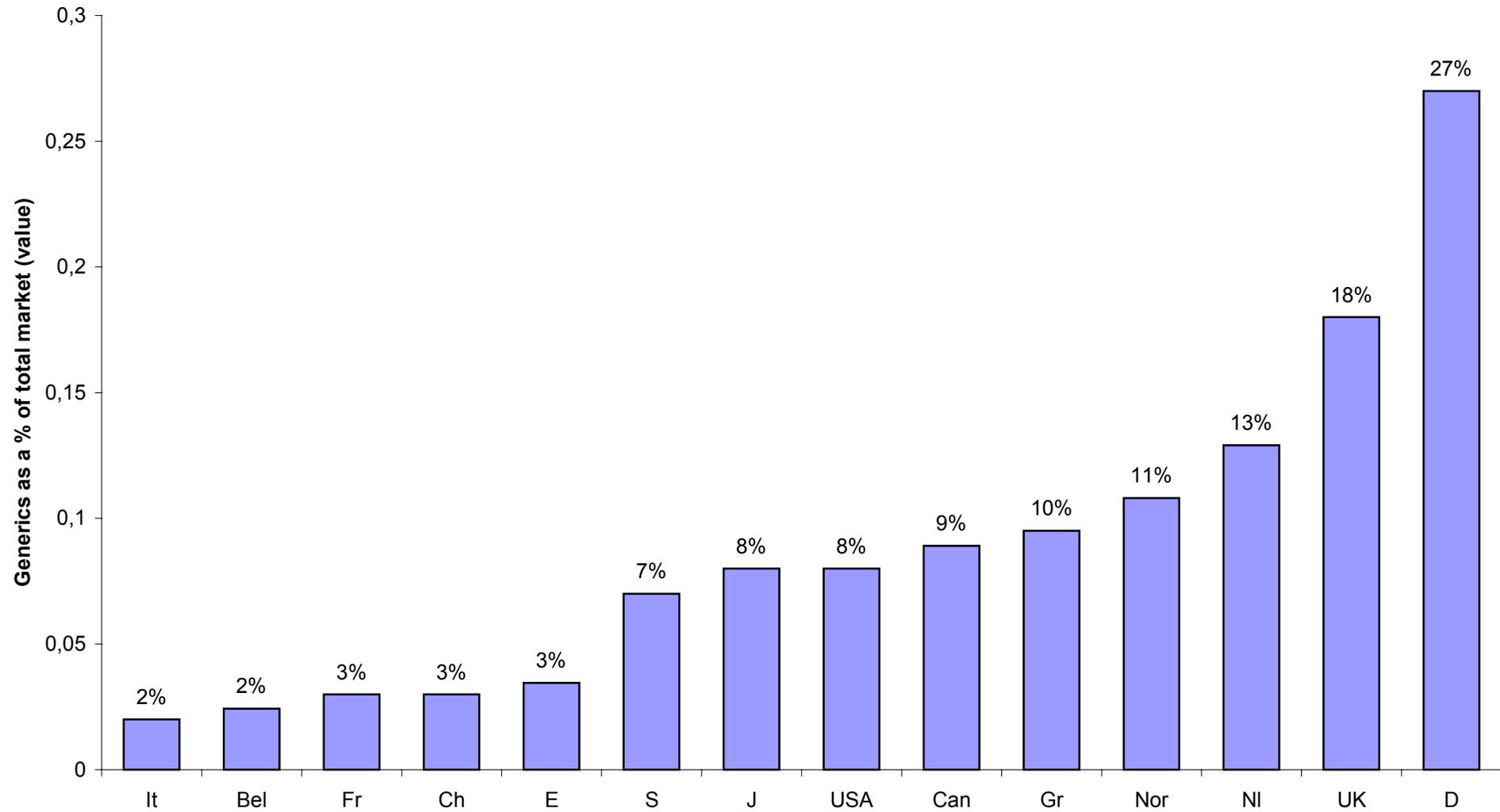
Indicator 4. Market Share of Generics

This indicator seeks to show the development of the pharmaceutical market.

Definitions of generics are not consistent in different countries, which causes problems in data collection, and market data collected from wholesalers does not identify the status of a product within a pricing system. The headline indicator uses the most reliable data produced by national associations, which in some cases came from Government sources.

Source: Various trade associations.

Chart: % (by value) of national pharmaceuticals market accounted for by generics, 2001

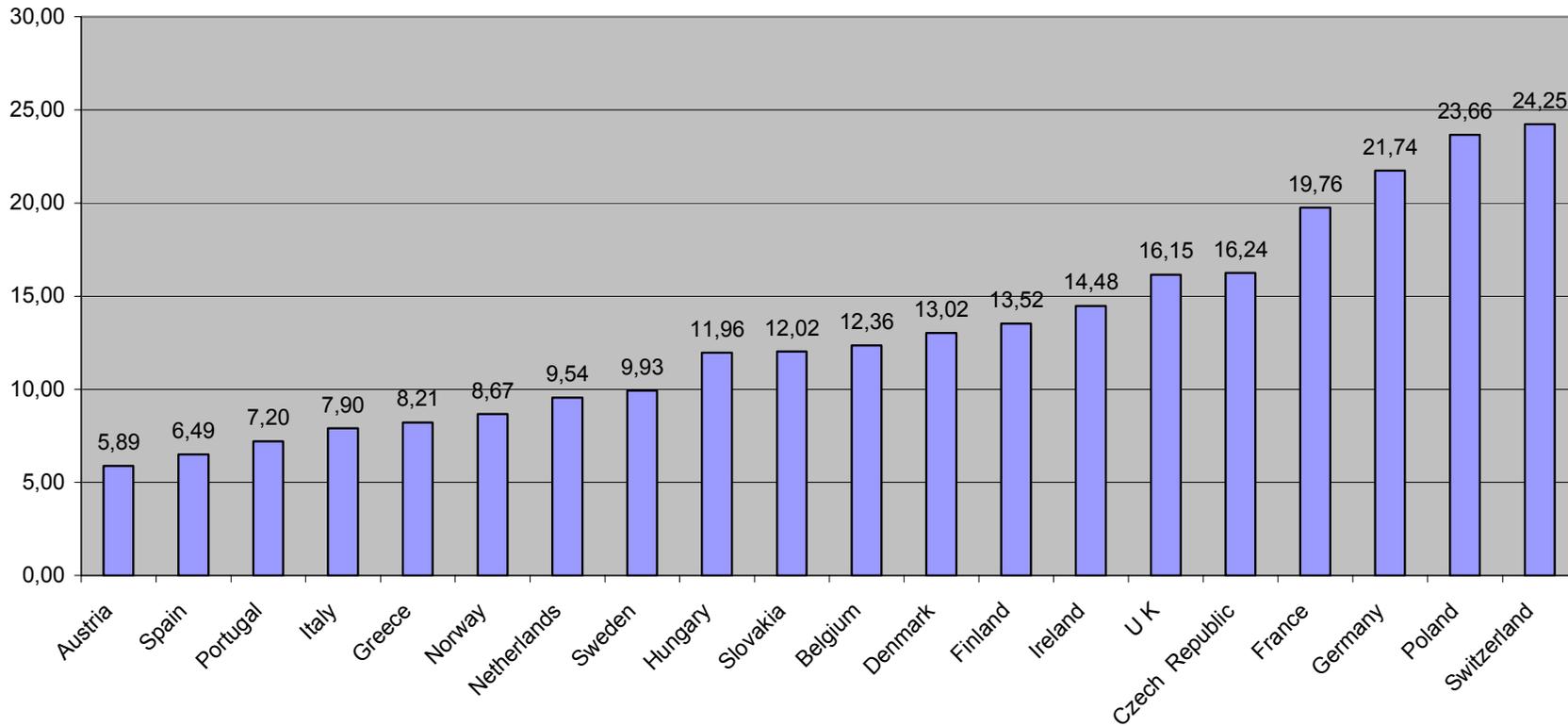


Indicator 5. OTC market

This indicator measures the dynamics of bringing ingredients into the category of non-prescription medicines which, due to their safety profile, can safely be used without the mandatory intervention of a medical doctor.

Non-prescription medicines sales as a percentage of the total pharmaceutical market in 2001

(Source: IMS Health)



Indicator 6: Time elapsed between application for market authorisation in first world market to launch in specific market

Indicator 6a

This measure captures the time lag between application for launch in any market to launch in specific markets for NMEs launched in the period.

In order to have as large a sample as possible time lags are expressed as hypothetical composites and do not follow individual NMEs through the process, but link together mean figures for groups of NMEs for each country for each stage and time period.

The three main reasons for delay are company strategy (when to apply, when to launch) length of regulatory process, and length of pricing and reimbursement process.

In the majority of Member States, medicines may only be launched onto the market once the competent authorities have fixed a price and/or the medicine has been admitted for reimbursement. This indicator only measures time which elapses between marketing authorisation and launch regardless of the reimbursement status of medicines.

For those medicines eligible for reimbursement, this indicator cannot be used as a proxy for post-marketing authorisation delays resulting from pricing and reimbursement systems in Member States.

Indicator 6b

A study measuring elapsed times for pricing and reimbursement decisions for European countries is also included. In practice, in many countries, patients' access to new medicines will follow completion of the pricing and reimbursement process.

Time elapsed from first world application to application in specific market, application to regulatory approval, and regulatory approval to launch – 1991 - 2001

	Days			
	1st world application- application in market	application in market-approval in market	approval in market- launch in market	total time
Germany	266	402	80	748
UK	197	416	157	770
Sweden	226	409	142	777
Finland	281	391	135	807
Ireland	285	412	120	818
Denmark	274	402	150	825
Netherlands	252	431	164	847
Austria	281	394	212	887
Spain	263	449	193	905
Luxembourg	285	416	215	916
Belgium	285	423	237	945
Italy	270	442	245	956
Portugal	285	420	285	989
Greece	285	412	292	989
France	263	423	303	989
Switzerland	237	420	128	785
Norway	303	489	110	902
USA	88	416	73	577
Japan	515	723	106	1343

Source CMR International

Average time from pricing and/or reimbursement application to reimbursement (days)

	Time for pricing decision	Time for reimbursement decision	Time taken for publication	Total time	Number of products with P&R decision 'pending'
Belgium	127	544	90	761	11
Greece	138	217	60	415	11
Portugal	68	336	0	404	9
France	389		5	394	6
Austria	72	310	0	382	2
Finland	332		37	369	5
Italy	208		76	284	1
Norway	47	192	8	247	5
Spain	131	30	0	161	3
Netherlands	140		19	159	2
Switzerland	0	112	37	149	0
Sweden	91		9	100	0
Denmark	0	100	0	100	2
Ireland	19	32	17	68	0
Germany	0		0	0	0
UK	0		0	0	0

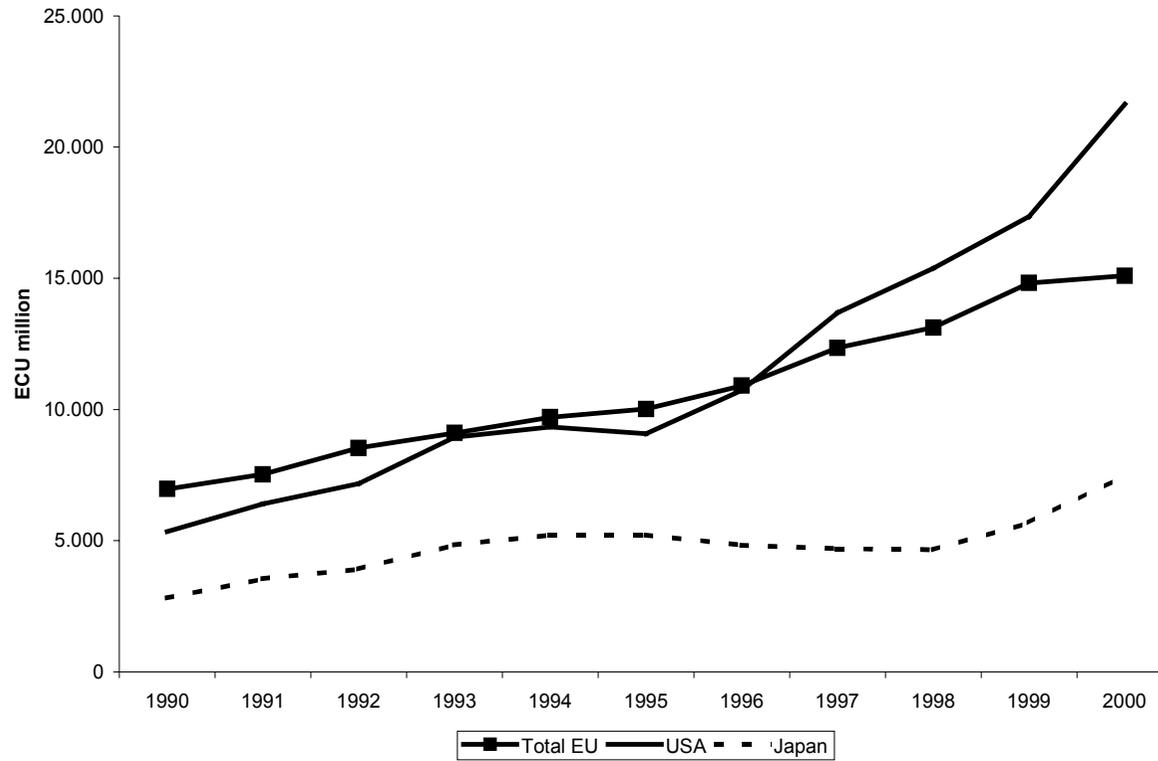
Source: Cambridge Pharma Consultancy, Delays in Market Access, December 2002.

Indicator 7: Industry expenditure on, and productivity of, pharmaceutical R&D

The US reached EU levels of expenditure by the pharmaceutical industry on research and development, by the middle of the nineties. The last four years of the decade saw the US overtake the EU in terms of total R&D expenditure and it continues to grow at a faster pace.

High levels of R&D expenditure for a country correlate with the existence of successful pharmaceutical corporations being headquartered there. This is seen by the growth in the US and the fact that nearly three-quarters of R&D expenditure in the EU is consumed in the UK, Germany and France

Industry pharmaceutical Research and Development expenditure – EU, USA and Japan 1990 – 2000 Indicator 7



Source: Trade Associations

Indicator 8: Pharmaceutical industry trade balance

The largest share of trade for the EU countries is within the EU.

All the major pharmaceutical producing nations in the EU enjoy a positive trade balance with the US.

All EU candidate countries ran pharmaceutical trade deficits in 2001.

Nearly €90bn of pharmaceuticals were exported by the EU countries in 2001.

Trade balance in pharmaceuticals 2001 – Euro m

2001 Trade €m			
	imports	exports	balance
Belgium	9.360,91	10.078,85	717,94
Denmark	1.152,02	3.315,01	2.162,99
Germany	9.550,17	16.683,98	7.133,81
Greece	1.253,96	341,46	-912,50
Spain	4.179,42	2.150,93	-2.028,50
France	8.180,80	13.502,79	5.322,00
Ireland	1.653,17	8.111,87	6.458,70
Italy	6.560,30	7.020,78	460,48
Luxembourg	181,13	34,21	-146,92
the Netherlands	4.947,24	5.813,34	866,10
Austria	2.032,65	2.093,26	60,61
Portugal	1.108,13	272,87	-835,26
Finland	837,70	326,69	-511,01
Sweden	1.583,05	4.578,02	2.994,98
United Kingdom	8.960,27	13.228,81	4.268,54
		87.552,88	
Candidate countries	2001 Trade €m		
	imports	exports	balance
Bulgaria	126,42	73,69	-52,73
Czech Republic	792,79	189,35	-603,45
Estonia	95,99	23,74	-72,25
Cyprus	96,76	69,09	-27,67
Latvia	163,22	61,65	-101,58
Lithuania	267,66	57,66	-210,00
Hungary	682,58	462,28	-220,30
Malta	50,37	26,20	-24,17
Poland	2.037,29	177,60	-1.859,69
Romania	314,97	13,39	-301,58
Slovenia	502,66	252,31	-250,35
Slovakia	436,08	98,45	-337,64
Turkey	1.206,16	140,93	-1.065,22
Other countries	2001 Trade €m		
	imports	exports	balance
USA	17.789,27	13.911,34	-3.877,93
Japan	4.704,20	2.169,49	-2.534,71
Switzerland	6.680,28	12.137,49	5.457,21
Norway	814,37	239,64	-574,73
World	121.400,21	127.826,13	6.425,92

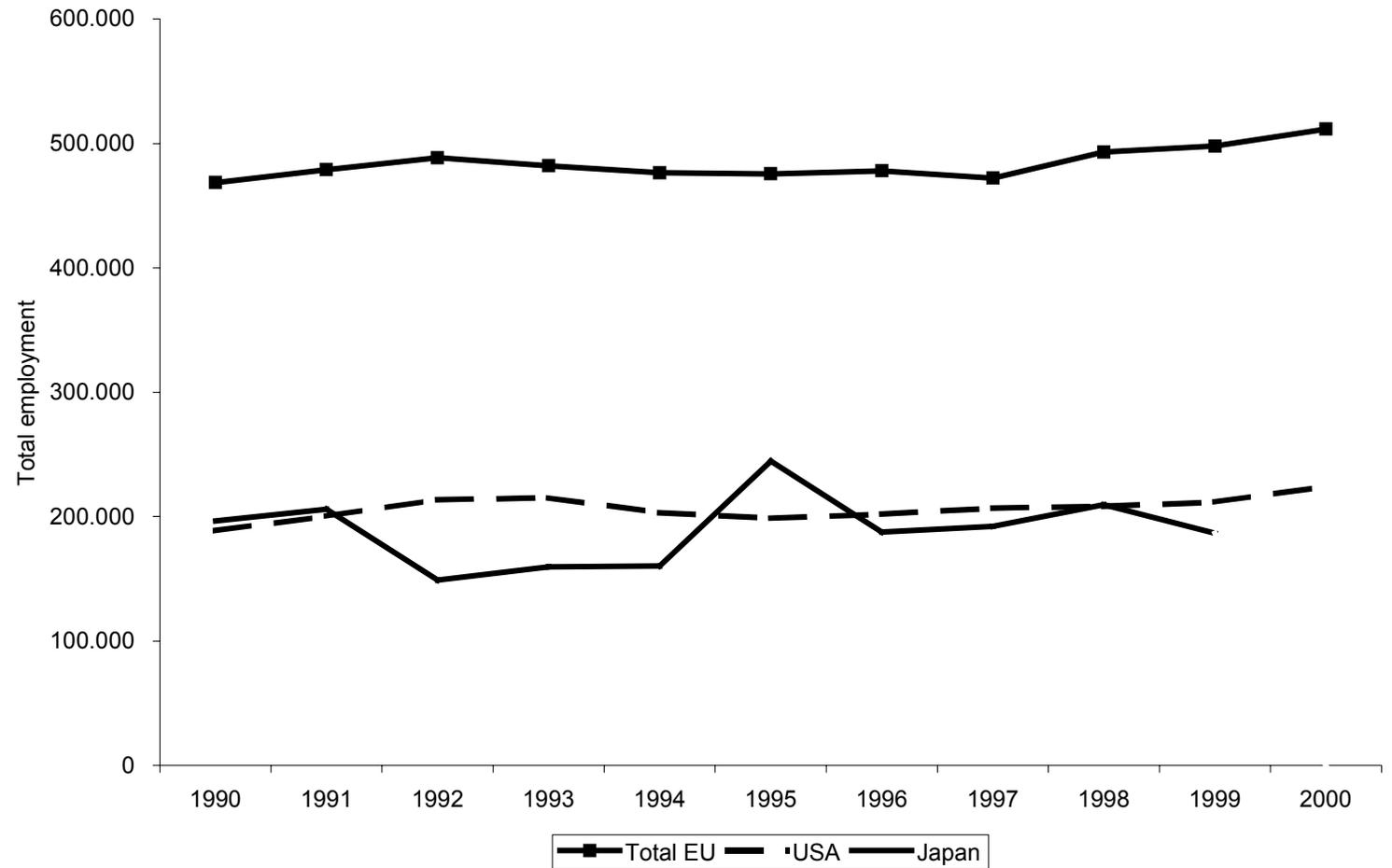
Source: Global Trade Information Service – World Trade Atlas – Accessed 20/11/2002
 Industry classification used – 30 Pharmaceutical Products

Indicator 9: Employment in the pharmaceutical industry

Employment levels in the EU and the US have remained stable throughout the nineties.

Europe is still the most significant source for employment for the industry with a workforce over twice that of the US or Japan.

Pharmaceutical industry total employment, EU, USA, Japan 1990 – 2000



Source: Government and Trade Associations

Annex C
Membership of G10 Medicines

Erkki Liikanen: Commissioner for Enterprise and Information Society

David Byrne: Commissioner for Health and Consumer Protection

Ulla Schmidt: Federal Minister for Health, Germany

Leif Pagrotsky: Minister for Industry and Trade, Sweden

Jean-François Mattei: ministre de la Santé, de la Famille et des Personnes handicapées, France

Luís Filipe Pereira: Minister of Health, Portugal

Lord Warner: Minister of Health, United Kingdom

Angela Coulter: Chief Executive of the Picker Institute

Jean-François Dehecq: Vice-President of the European Federation of Pharmaceutical Industry Associations

Rory O’Riordan: Chairman of the European Generic Manufacturers Association

Albert Esteve: President of the Association of the European Self-Medication Industry

Chris Viehbacher: President, US Pharmaceuticals GlaxoSmithKline

Ron Hendriks: President of the Association internationale de la Mutualité

LEGISLATIVE FINANCIAL STATEMENT

Policy area: ENTERPRISE

Activity: 02 04 GETTING STILL MORE FROM THE INTERNAL MARKET

TITLE OF ACTION:

1. BUDGET LINE(S) + HEADING(S)

B5-3121 (ABB 02 04 02 02) European Agency for the Evaluation of Medicinal Products - Subsidy for Title 3 (partially)

2. OVERALL FIGURES

2.1. Total allocation for action (Part B):

7 € million in 2003 and 7,5 € million in 2004 for commitment. These amounts are already covered by existing (Budget 2003) or approved (PDB 2004) budget appropriations in line B5-3121. The potential need for funds in subsequent years will be discussed in accordance with the appropriate budgetary procedures.

2.2. Period of application:

Annual action

2.3. Overall multiannual estimate of expenditure:

- (a) Schedule of commitment appropriations/payment appropriations (financial intervention) *(see point 6.1.1)*

€ million *(to three decimal places)*

	Year 2003	Year 2004
Commitments	7,000	7,500
Payments	7,000	7,500

- (b) Technical and administrative assistance and support expenditure *(see point 6.1.2)*

Commitments	0	0
Payments	0	0

Subtotal a+b		
Commitments	7,000	7,500
Payments	7,000	7,500

- (c) Overall financial impact of human resources and other administrative expenditure
(see points 7.2 and 7.3)

Commitments/ payments	n.a.	n.a.
-----------------------	------	------

TOTAL a+b+c		
Commitments	7,000	7,500
Payments	7,000	7,500

2.4. Compatibility with financial programming and financial perspective

Proposal is compatible with existing financial programming.

2.5. Financial impact on revenue:²⁸

Proposal has no financial implications (involves technical aspects regarding implementation of a measure)

3. BUDGET CHARACTERISTICS

Type of expenditure		New	EFTA contribution	Contributions form applicant countries	Heading in financial perspective
Non-comp	Diff	NO	YES	NO	No 3

4. LEGAL BASIS

Dir. 2001/83/EC of the EP and of the Council of 6/11/01 on the Community code relating to medicinal products for human use, OJ L311/67, 28/11/01;

Reg. 2309/93 of the Council laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Agency for the Evaluation of Medicinal Products, OJ L 214/1, 24/08/1993 ;

Dir. 2001/20/EC of the EP and Council of 4/04/2001 on the implementation of good clinical practice in the conduct of clinical trials on medicinal products for human use)

²⁸ For further information, see separate explanatory note.

5. DESCRIPTION AND GROUNDS

5.1. Need for Community intervention ²⁹

5.1.1. Objectives pursued

(Describe the problem(s)/need(s) (in measurable terms) that the intervention is designed to solve/satisfy (the baseline situation against which later progress can be measured). Describe the objectives in terms of expected outcomes (for example as a change in the above baseline situation).)

5.1.2. Measures taken in connection with ex ante evaluation

(This involves:

- (a) explaining how and when the ex ante evaluation was conducted (author, timing and where the report(s) is/are available) or how the corresponding information was gathered;³⁰*
- (b) describing briefly the findings and lessons learnt from the ex ante evaluation.)*

5.1.3. Measures taken following ex post evaluation

(Where a programme is being renewed the lessons to be learned from an interim or ex post evaluation should also be described briefly.)

5.2. Action envisaged and budget intervention arrangements

(This point should describe the logic behind the proposal. It should specify the main actions to achieve the general objective. Each action should have one or more specific objectives. These should indicate the progress expected over the proposed period. They should also look beyond immediate outputs but be sufficiently precise to allow concrete results to be identified. Specify for each main action:

- the target population(s) (specify number of beneficiaries if possible);*
- the specific objectives set for the programming period (in measurable terms);*
- the concrete measures to be taken to implement the action ;*
- the immediate outputs of each action; and*
- the contribution of these outputs to the expected outcomes in terms of satisfying needs or solving problems*

Information should also be given on the budget intervention arrangements (rate and form of the required financial assistance.)

²⁹ For further information, see separate explanatory note.

³⁰ For minimum information requirements relating to new initiatives, see SEC 2000 (1051)

5.3. Methods of implementation

(Specify the methods to be used to implement the planned actions: direct management by the Commission using either regular or outside staff or by externalisation. In the latter case, give details of the arrangements envisaged for this externalisation (TAO, Agencies, Offices, decentralised executive units, management shared with Member States - national, regional and local authorities.)

Indicate the effect of the externalisation model chosen on the financial intervention, management and support resources and on human resources (seconded officials, etc..)

6. FINANCIAL IMPACT

6.1. Total financial impact on Part B - (over the entire programming period)

6.1.1. Financial intervention

Commitments (in € million to three decimal places)

Breakdown	2003	2004
Action 1 To build and operate pharmacovigilance networks : EudraNet, EudraVigilance and SUSAR	7,000	7,500
TOTAL	7,000	7,500
	2003	2004
1) Technical and administrative assistance	0	0
a) Technical assistance offices	0	0
b) Other technical and administrative assistance: - intra muros: - extra muros: <i>of which for construction and maintenance of computerised management systems</i>	0	0
Subtotal 1	0	0
2) Support expenditure	0	0
a) Studies	0	0
b) Meetings of experts	0	0
c) Information and publications	0	0
Subtotal 2	0	0
TOTAL		

6.2. Calculation of costs by measure envisaged in Part B (over the entire programming period)³¹

(Where there is more than one action, give sufficient detail of the specific measures to be taken for each one to allow the volume and costs of the outputs to be estimated.)

Commitments (in € million to three decimal places)

Breakdown	Type of outputs (projects, files)	Number of outputs (year 2004)	Average unit cost	Total cost (year 2004)
	1	2	3	4=(2X3)
<u>Action 1</u>				
To build and operate pharmacovigilance networks : EudraNet, EudraVigilance and SUSAR		3		7,500
<p>In view of the importance of the telematics programme in the pharmaceutical sector, the EMEA has taken as part of its activities the realisation of certain telematic projects.</p> <p>The following systems will be built and operated :</p> <ul style="list-style-type: none"> • EudraNet : electronic system, basis for all the community regulatory network (Member States, Commission and EMEA) ; • EudraVigilance : electronic system for the exchange of pharmacovigilance information ; • Clinical Trials Databases : data base containing all information related to the clinical trials which are performed in conformity with Community legislation ; • E-submission : electronic system for the submission of applications for the marketing authorisations ; • EuroPharm Database : data base containing all information related to the medicines authorised in the Community ; on a first stage the data base will only cover products authorised on the basis of the centralised procedure (Commission and EMEA). 				
TOTAL COST				7,500

³¹ For further information, see separate explanatory note.

7. IMPACT ON STAFF AND ADMINISTRATIVE EXPENDITURE

7.1. Impact on human resources

Types of post		Staff to be assigned to management of the action using existing and/or additional resources		Total	Description of tasks deriving from the action
		Number of permanent posts	Number of temporary posts		
Officials or temporary staff	A	n.a.	n.a.		<i>If necessary, a fuller description of the tasks may be annexed.</i>
	B				
	C				
Other human resources					
Total		n.a.	n.a.		

7.2. Overall financial impact of human resources

Type of human resources	Amount (€)	Method of calculation *
Officials	n.a.	n.a.
Temporary staff		
Other human resources (specify budget line)	n.a.	n.a.
Total	n.a.	n.a.

The amounts are total expenditure for twelve months.

7.3. Other administrative expenditure deriving from the action

Budget line (number and heading)	Amount €	Method of calculation
Overall allocation (Title A7)	n.a.	n.a.
A0701 – Missions		
A07030 – Meetings		
A07031 – Compulsory committees ¹		
A07032 – Non-compulsory committees ¹		
A07040 – Conferences		
A0705 – Studies and consultations		
Other expenditure (specify)		
Information systems (A-5001/A-4300)	n.a.	n.a.
Other expenditure - Part A (specify)	n.a.	n.a.
Total	n.a.	n.a.

The amounts are total expenditure for twelve months.

8. FOLLOW-UP AND EVALUATION

8.1. Follow-up arrangements

(Adequate follow-up information must be collected, from the start of each action, on the inputs, outputs and results of the intervention. In practice this means (i) identifying the indicators for inputs, outputs and results and (ii) putting in place methods for the collection of data).

8.2. Arrangements and schedule for the planned evaluation

(Describe the planned schedule and arrangements for interim and ex post evaluations to be carried out in order to assess whether the intervention has achieved the objectives set. In the case of multiannual programmes, at least one thorough evaluation in the life cycle of the programme is needed. For other activities ex post or mid-term evaluations should be carried out at intervals not exceeding six years.)

9. ANTI-FRAUD MEASURES

(Article 3(4) of the Financial Regulation: "In order to prevent risk of fraud or irregularity, the Commission shall record in the financial statement any information regarding existing and planned fraud prevention and protection measures.")