



**Experiences and Impact of European
Risk-Sharing Schemes
Focusing on Oncology Medicines**

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Acronyms – List of Abbreviations

AIFA	Agenzia Italiana del Farmaco (Italian Medicines Agency)
AMD	Age-related macular degeneration
ASMR	<i>Amelioration du service medical rendu</i> (the additional therapeutic benefit versus current standards) (France)
CED	Coverage with Evidence Development
CEPS	Comité Economique Des Produits De Santé (Healthcare Products Pricing Committee) – France
CRC	Colorectal Cancer
EASP	Escuela Andaluza de Salud Pública (Andalusian School of Public Health)
EMINet	European Medicines Information Network
HCC	Hepatocellular carcinoma
HTAi	Health Technology Assessment International
LEEM	Les Entreprises du médicament (Pharmaceutical Companies' Representative Body) - France
MAH	Marketing Authorization Holder
mBC	Metastatic Breast Cancer
mCRC	Metastatic Colorectal Cancer
NICE	National Institute for Health and Clinical Excellence (UK)
NSCLC	Non-small cell lung carcinoma
OFT	Office of Fair Trading (UK)
PPRS	Pharmaceutical Price Regulation Scheme (UK)
RCC	Renal Cell Carcinoma
RSS	Risk Sharing Scheme
STS	Soft Tissue Sarcoma

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Executive Summary

Objective

The objective of this study is to gather information from Member States on current practices involving risk sharing schemes (RSS) for oncology products and to share a preliminary analysis of their implementation from a public authority's perspective. The report was prepared in the EMINet framework agreement with the European Commission.

Methodology

Online survey

An online survey was developed composed of two parts, a descriptive analysis and an impact evaluation. In April 2010 a link to the survey was sent to all the European Union Member States and EFTA countries that are represented in the Network Meetings of the Competent Authorities on Pricing and Reimbursement. The answers were received until July 2010.

Literature Review

A literature review performed in 2009 was updated with articles published in 2010. The typology of risk sharing models as described in the 2009 EMINet Risk Sharing Report¹ remained unchanged. In addition, findings from stakeholder conferences and other grey literature were analysed.

Results

Based on the survey results, six European countries are currently using some form of oncology risk sharing schemes (either financially- or outcome-based). Most of them are financially-based schemes since outcome-based schemes are more complex to implement. Italy and the UK have the most experience in these schemes, but many differences exist with regards to how each country opts to implement them.

Conclusions

The use of RSS in Europe on oncology products is a new and growing trend that is based on the need for new ways to finance high-cost medicines whose effectiveness remains uncertain. Nonetheless, no common approach exists across countries to deal with these new schemes for financing oncological medicines. An effort must be made to estimate the real opportunity costs implicit in implementing these new risk sharing schemes while at the same time taking into account their impact on international reference pricing. Some countries have begun evaluating how RSS have been implemented; however, no final results have as yet emerged.

¹ Available at <http://www.emi-net.eu>

Introduction

A new approach to financing medicines, generally known as Risk-Sharing Schemes – RSS (also known as “access with evidence development schemes”, “innovative pricing schemes”, “patient access schemes”, “coverage with evidence”, “managed entry agreements” etc)², has been introduced in EU Member States over the past few years. Under the EMINet project, a previous report³ was publishing defining the concepts, terminology and classification of these new pharmaceutical financing projects, based on peer reviewed and grey papers published over the last decade.

As with all new pharmaceutical policy instruments, only limited information exists regarding their objectives, methodologies (including adjustments in methodologies of on-going experiments), or monitoring systems; evaluations of the extent to which they meet their objectives are also scarce.

A survey was prepared to gather information on the implementation and functioning of country-specific RSS, supplementing information in the previously mentioned EMINet report. Its specific objectives, therefore, were twofold: first, to supplement the previous EMINet RSS report with an overview of RSS practices on oncology throughout Europe; second, to assess the implementation and progress of RSS throughout Europe, focusing mainly on oncology medicines.

There are several reasons for selecting only oncology drugs in the study: first, most of the innovative schemes that have been implemented in recent years have been based on medicines for treating some kind of cancer; second, the access to oncology medicines varies substantially across European countries⁴; and third, the “value for money” of oncology medicines introduced over recent years is often seen to be rather low in the literature; there is a perception that new medicines “reaching the European market between 1995-2000 offered few or no substantial advantages over existing preparations, yet cost several times—in one case 350 times—more”⁵.

² The definition used has been “the agreement between third party payer and manufacturers which links the final remuneration or reimbursement of a pharmaceutical to a previously agreed objective, mainly focusing on effectiveness or budget impact”.

³ Espin J, Rovira J. Risk Sharing Schemes for Pharmaceuticals: Terminology, Classification and Experiences. EMINet. October 2009, Available on: <http://www.emi-net.eu> – Resource Centre

⁴ Wilking N, Jönsson B. A pan-European comparison regarding patient access to cancer drugs. Stockholm, Sweden, Karolinska Institutet and Stockholm School of Economics, 7 September 2005. Available on http://ki.se/content/1/c4/33/16/Cancer_Report.pdf (Access on 10/10/ 2010)

⁵ Garattini S, Bertelé V. Efficacy, safety, and cost of new anticancer drugs. *BMJ*. 2002;325:269–71

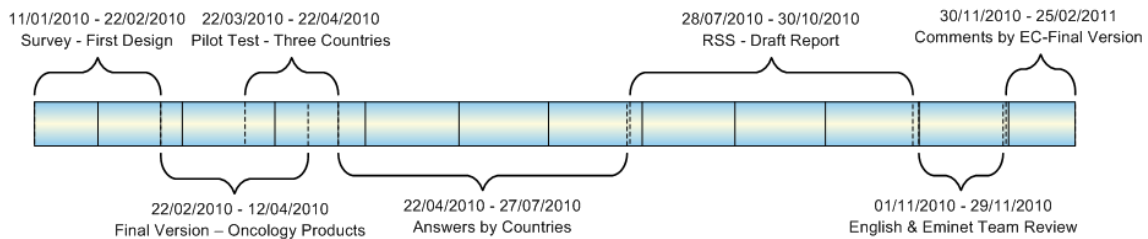
1. Methodology

1.1. ONLINE SURVEY

In order to gather information about different European experiences with risk sharing schemes that focus on oncology medicines, an online survey was designed and made available on the EMINet website⁶.

The first version of the questionnaire was tested by three countries (Czech Republic, France and Sweden and the DG Enterprise and Industry of the European Commission from March 22nd to April 22nd 2010. Several comments and suggestions were made that were later incorporated in the final version.

Figure 1: Survey and Report Timeframe



The questionnaire was launched on April 22nd 2010. Although a May 21st deadline had initially been established, answers received by July 27th 2010 were still accepted.

The survey was divided into two different parts. The first part invited respondents to include information about the different RSS on oncology products that had been designed and set up in their countries. The second part aimed at obtaining information on at least one RSS implemented and evaluated in each country, in order to find examples of best practice.

The survey's design included alternative questions that were dependent on the respondent's previous answers (for example, there were 4 questions for countries with no experience in RSS, but whose opinions were of interest to our analysis, and 40 questions for countries with broader experience and who had conducted an evaluation of the scheme's impact). The entire survey can be consulted in Annex 1.

⁶ <http://www.emi-net.eu/surveys/index.php?sid=29952&lang=en>

1.2. LITERATURE REVIEW

In the previous EMINet study on RSS⁷, a systematic literature review was carried out to obtain a complete “snapshot” of existing academic literature on the issue. It located approximately 24 articles that had been published over the last 10 years containing information on different agreements that had been implemented, some of which were quite detailed (particularly those from the UK), whereas others were more limited to brief comments on the subject.

At the beginning of 2010, the academic journal *Pharmacoeconomics* published a special edition on this topic (number 28-2), mainly focussing on performance-based agreements. These articles provide extra information on the recent implementation of such agreements.

This report has been completed with grey literature focusing on this topic, mainly the meeting papers of two conferences held in Bratislava (April 2010) and in London (October 2010) and two non-academic journals (IMS Pharma Pricing & Reimbursement and Scrip).

1.3. PROPOSED TAXONOMY

As noted in the introduction, risk-sharing is a relatively new concept that can often generate varying degrees of confusion and misunderstanding⁸. Key issues still remain the subject of debate, for example: 1) the most appropriate term for such contracts, and 2) the typology model that would best serve to classify the variety of schemes that have been implemented over the past few years.

Several terms and definitions are used to describe these schemes. For example, the literature mentions terms such as: “access with evidence development”⁹, “coverage with evidence development (CED)”¹⁰, “performance-based agreement”, “innovative reimbursement agreements”, “performance-based reimbursement schemes”, “patient access schemes”, “risk sharing agreements”, etc

In our previous EMINet paper on the topic of risk-sharing the definition used was “the agreement between third party payer and manufacturers which links the final remuneration or reimbursement of a pharmaceutical to a previously agreed objective, mainly focusing on effectiveness or budget impact”. But many other definitions have arisen in recent years, for example: “the process by which two parties or more agree to share the risks associated with achieving a certain outcome”¹¹; for performance-based agreement “as one between a payer and a pharmaceutical, device or diagnostic manufacturer where the price level and/or revenue received is related to the future

⁷ Espin J, 2009

⁸ Pugatch M, 2010.

⁹ McCabe C, 2010

¹⁰ This term is used in the US (Medicare)

¹¹ Pugatch M, *op. cit.* pag. 4

performance of the product in either a research or a real-world environment”¹²; and for access with evidence development (AED) as “an initiative in which a payer provides temporary or interim funding for a particular technology or service to facilitate the collection of information needed to reduce specific uncertainties around a coverage decision”¹³. Recently, the Health Technology Assessment International has used the term “managed entry agreements”, defined as “An arrangement between a manufacturer and payer/provider that enables access to (coverage/reimbursement of) a health technology subject to specific conditions. These arrangements can use a variety of mechanisms to address uncertainty about the performance of technologies or to manage the adoption of technologies in order to maximise their effective use or limit their budget impact”¹⁴.

In this survey we used the taxonomy of risk-sharing schemes (figure 2) which was included in the previous EMINet report, based on the IMS Pharma Pricing & Reimbursement IMS article published on 2009. The final version of this taxonomy was published in *Health Policy* in 2010¹⁵, based on a study from the University of Washington.

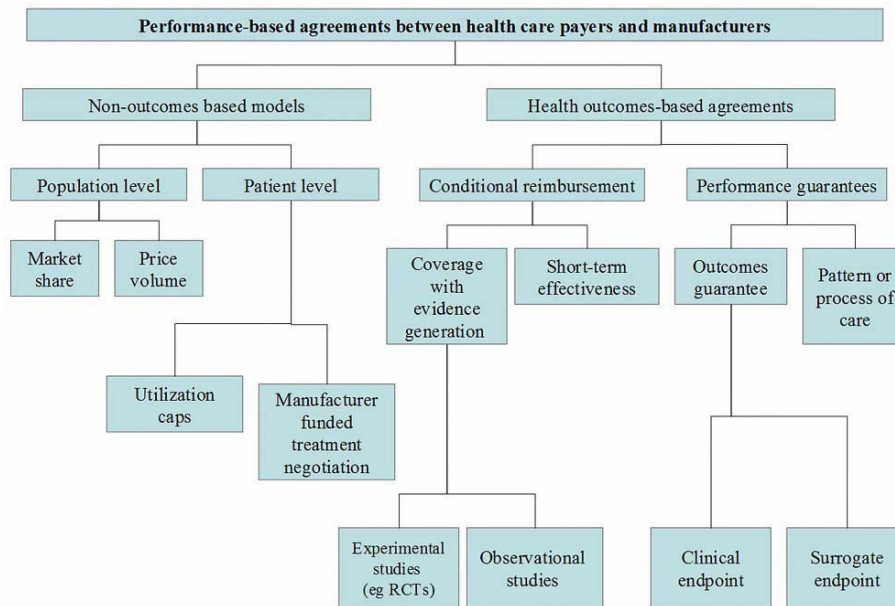
¹² Towse A, 2010.

¹³ Stafinski T, 2010

¹⁴ <http://www.htai.org/index.php?id=419>

¹⁵ Carlson JJ, 2010

Figure 2: Taxonomy of Risk Sharing Agreements



Source: IMS Pharma Pricing & Reimbursement – 2009

Several limitations emerge when trying to apply this typology to European experiences on innovative risk sharing agreements: first, agreements are normally drafted in the local language, which means that the task of translating the terminology to match these pre-defined boxes can be challenging; second, although this classification system appears to be based on a very closed model, it can be modified to include new types of agreements that are coming up now (for example, the UK has some risk-sharing agreements that could be classified, according to this taxonomy, as “utilization caps” but that are actually classified by UK representatives as “outcomes-based schemes”); and third, certain countries do not characterize some of their agreements as risk-sharing schemes (for example, Austria does not consider conditional reimbursement to be a form of risk-sharing).

With the previously mentioned limitations in mind, it is quite likely that the only possible consensus that could be reached is that, in principle, two main types of risk-sharing schemes can be distinguished: those based on financial results and those based on outcomes. Regarding the latter, a new report is being prepared by the EMINet team in 2011, under the new EU Platform on access to medicines in Europe.

2.1. COUNTRIES WITH ONCOLOGY RISK-SHARING SCHEMES

According to the results of our survey, six European countries stated that they are using new innovative contracting instruments for oncology medicines: France, Italy, Lithuania Portugal, Slovenia and the United Kingdom. Italy and the United Kingdom reported more RSS experiences than the others; furthermore, a greater amount of literature on this subject can be found for both these countries.

Literature (mainly grey) can also be found for other countries that have implemented RSS but did not answer this survey. Those countries are Belgium, the Netherlands and Germany. Due to the lack of sufficient information, however, it is not possible to know whether or not the RSS they have implemented focus on oncology products.

In the following sections we will present the main information gathered from the surveys and evaluate it.

2.1.1 Portugal

Portugal is an example of a country that specifically regulates the use of non-outcomes-based access schemes. Decree-Law n° 195/2009 provides that prior to using these medicines (listed in table 1) in hospitals, an agreement must be reached with the marketing authorisation holder. An agreement is made on each individual product and includes the establishment of a maximum price and a maximum annual budget. This maximum budget is based on the estimated population that will use the medicine. If the budget is exceeded, the marketing holder is required to pay back the difference. These agreements are in effect for a 2-year period, and at the end of this period the case for maintaining or changing the agreement is reevaluated.

Products for hospital oncology medicines covered by these agreements are listed in Table 1. All the agreements began in 2007 and are expected to last for a two-year period, but they could be revised and maintained longer, depending on the results of each evaluation.

Table 1: Financial Agreements in Portugal for Hospital Oncology Medicines

Brand Name	Active ingredient	Marketing Authorisation Holder
Sprycel	Dasatinib	Bristol Myers Squibb
Nexavar	Sorafenib	Bayer
Revlimid	Lenalidomide	Celgene Europe
Lucrin Depot	Leuproreline	Abbot
Keloda	Capecitabine	Roche
Yolendis	Trabectadine	Pharma Mar
Litak	Cladribine	Lipomed GmbH
Vectibix	Panitumumab	Amgen
Torisel	Temsirolimos	Wyeth Europe
Evoltra	Clofarabine	Genzyme Europe

Source: Infarmed (National Authority of Medicines and Health Products) – Ministry of Health (Portugal)

2.1.2 Germany

Although most of the experiences included in this report have been obtained through information provided by EU Member States' representatives, some additional information has also been collected from the literature in order to get a more complete picture of the RSS situation in Europe.

Germany is a case in point: while no information was provided by its government representatives, the literature points to the existence of several experiences. One possible explanation might be due to the fact that Germany provides health care to its citizens (including pharmaceuticals) through sickness funds or a statutory health system. Since a federal law introduced in the year 2007 increased competition among statutory health insurance funds, sickness funds have been able to negotiate contracts directly with pharmaceutical companies, thus eliminating prior requirements to make contracts through the Federal Joint Committee (G-BA), the country's decision-making body for health care.

The German experience in oncology RSS centers on an agreement made in 2007 between Roche and several sickness funds to co-administer Avastin with Taxol to test whether the combination of both medicines could extend patient survival in mBC and mRCC. Under that scheme, "Roche agreed to provide full or partial reimbursement for cases in which the treatment exceeded a specific total dosage over a certain period of time. In the meantime, the Avastin + Taxol combination would have the opportunity to be tested in a real world environment"¹⁷. According to the literature, "an extension of survival by the combination therapy could not be shown, as compared to Taxol on its own. In part, this may have been because at least 23% of patients had to discontinue treatment early due to toxicity issues or other complications. Consequently, most patients did not reach the total dose agreed in the contract"¹⁸.

2.1.3 France

France uses a common approach for all risk sharing schemes that is based on a framework agreement between LEEM (*Les Entreprises du médicament* - Pharmaceutical Companies' Representative Body) and CEPS (*Comité Economique Des Produits De Santé* - Healthcare Products Pricing Committee). This framework covers all risk sharing schemes based on financial results, but does not cover those based on clinical results.

The first reported example of RSS in France is a price volume agreement for an oncology medicine whose name could not be disclosed due to a confidentiality clause in the contract. The main objective of this price volume agreement, which will be in effect from 2010 to 2015, is overall budget control. Traditionally, France implements volume clauses either through paybacks/ clawbacks or price reductions. Minor and potentially

¹⁷ Pugatch M, *op cit.* pag. 20

¹⁸ Pugatch M, *op cit.* pag. 20

reversible excess sales above the contractual thresholds may lead to a series of marginal price alterations entailing high administrative costs. To prevent this, the CEPS frequently agrees to condition the implementation of price reductions to exceeding a variation threshold, so price reductions that are not implemented are compensated for by an equivalent amount of bulk discounts. According with CEPS annual report 2008 and 2009, “volume clauses are essential in the relatively frequent situations where a novel drug’s ASMR (*Amelioration du Service Medical Rendu*) rating is only applicable to some of its indications or to a small patient group or where, regardless of any financial considerations, public health requirements dictate that a medicine should only be used for a limited number of indications for which it is absolutely essential, as is often the case for antibiotics”¹⁹.

The second example has to do with a manufacturer-funded treatment negotiation agreement that was implemented on two occasions in 2008: the first involved Naglazyme (treatment for mucopolysaccharide type VI disease) and the second Soliris (for paroxysmal nocturnal haemoglobinuria). In both cases, an agreement on prices was reached up to a fixed maximum budget ceiling which required the companies to supply the medicine, without restrictions, to all patients who might benefit from it while also paying back to national health insurance any turnover made above the maximum budget ceiling. These agreements are in force until 2013.

According to the CEPS’ annual report for 2008 related to new rules regarding orphan medicines, “The companies should be satisfied with this, as their international price is adhered to and the fixed turnover ceiling is set at a higher level than the market share they would have in France if access to the medicine among the patients concerned was the same in all countries in which the medicine is sold.”²⁰ From a payer’s perspective, the report states that “from the national health insurance point of view, since the number of patients who will benefit from the medicine will naturally be greater than the number which the fixed ceiling would fund, hence ensuring a payback by the companies, the contract guards against unpleasant financial surprises and in practice sets the actual price at a lower level”²¹.

The third example in France is a health outcomes-based agreement that falls under the category of conditional reimbursement price and takes into account the results of clinical or observational studies established for the period 2006-2013. In this agreement, called “price maintained according to evidence generation” and which applies to Glitazone, consensus was reached that the reimbursement price would only be maintained if the medicine achieved a higher ASMR (*Amelioration du service medical rendu*, which refers to the additional therapeutic benefit versus current standards) price rating depending on the results of observational/clinical studies. If the results of those studies are negative, the company is required to pay back the difference for past utilisation and apply a price reduction on future sales. In this case, the main objective is to generate additional evidence on which price and/or reimbursement should be established.

¹⁹ France. CEPS (Healthcare products pricing committee) Annual report 2008. Pag. 57. Available in http://www.sante.gouv.fr/IMG/pdf/CEPS_-_rapport_activite_ceps_2008_anglais.pdf (access on January 17th, 2011)

²⁰ CEPS Annual report 2008. Pag. 25

²¹ CEPS Annual report 2008. Pag. 25

2.1.4 Italy

Italy is one of the European countries where RSS have been most widely implemented. No specific legislation covers these innovative contracting instruments; rather, they are part of a negotiation procedure for pricing and reimbursement. The procedure involves the Committee for Pricing and Reimbursement of the Italian Medicines Agency (AIFA) and the marketing authorisation holder (MAH). AIFA proposes different RSS on a case-by-case basis when the launch of a new high-cost pharmaceutical presents uncertainties concerning value, clinical results and/or the budget impact, and potentially inappropriate use.

Various types of RSS have been developed in Italy. The choice on the type of RSS depends on the data concerning efficacy and safety available when decisions on pricing and reimbursement are being made. This choice is also dependent on the pharmaceutical product's characteristic, the availability of alternative therapies, the AIFA's and the manufacturers' preferences, and results of the negotiation process on pricing and reimbursement.

Italy has its own classification system for these new innovative contracts which takes into account three schemes: Payment by Results, Cost-Sharing, and Risk-Sharing. The *Payment by Results* scheme is the most frequent type of agreement in the oncology field, but the two other schemes are also relevant for oncology medicines. PbR links reimbursement level to previously agreed upon and expected clinical and health outcomes. The Italian NHS pays only the cost of treatment for patients responding positively. Treatments of non-responders are ceased and all related therapeutic costs are paid by the manufacturers. The *Cost-Sharing scheme* consists of a discount on the (initial) treatment costs *for all eligible patients*, whereas in the scheme more properly defined as *Risk-Sharing* the discount is applied to the cost of the initial therapy cycle(s) *for non-responder patients*. The multiple innovative access schemes implemented in Italy are either variations or modalities of these financially-based schemes (cost sharing scheme), or based on health outcomes schemes (payment by results or risk sharing schemes), and they are shown in Table 2.

Table 2: Innovative Access Schemes in Italy for Oncology Medicines

Payment by results	Cost Sharing Scheme	Risk Sharing Scheme
Dasatinib (Leukemia) - 2007 Nilotinib (Leukemia) - 2008 Temsitrolimus (RCC) - 2008 Sorafenib (HCC) – 2008 Pegaptanib (AMD) – 2009 Ranibizumab (AMD) - 2009 Trabectedin (STS) - 2009 Lapatinib (mBC) - 2009	Erlotinib (NSCLC) -2006 Sunitinib (RCC) -2006 Sorafenib (RCC) -2006 Bevacizumab – 2008 Bortezomib (Myeloma) - 2009	Panitumumab (mCRC) -2009 Cetuximab (CRC) - 2009

Source: Compilation by the authors based on EMINet survey, literature review and presentations

According to the information provided by the AIFA representatives, each RSS has a common design that follows the previous classification, but each scheme can be implemented differently (Table 3).

Table 3: Description of RSS in Italy

Active Ingredient	Description	Date
Bortezomib	Cost-sharing scheme that requires manufacturers to pay back 50% of the treatment cost for all eligible patients during the first treatment cycle (6 weeks of treatments).	2009-2011
Erlotinib	50% price reduction for the first two cycles of therapy.	2006-2011
Nilotinib	Manufacturers must assume all costs for the first month of treatment for non-responder patients	2008-2011
Panitumumab	Risk sharing scheme that requires the manufacturer to pay-back 50% of the cost for non-responders (evaluation after 2 months of treatment).	2008 - 2012
Sorafenib	Treatment of advanced renal cell carcinoma: Risk sharing consisting of a 50% price reduction for the first 3 months of treatment. Treatment of hepatocellular carcinoma: Full price reduction for the first 2 months of treatment. Later reimbursed through credit notes for non-responders (2008)	2009-2011
Sunitinib	50% price reduction for the first three months of treatment.	2006 - 2011
Temsirolimus	The medicine is freely provided by the manufacturer for the first two months of treatment but only for non-responders.	2008 - 2011

Source: AIFA (Italian Medicines Agency) – Ministry of Health

Currently, Italy has approximately 35 price volume agreements on pharmaceuticals, but none of them involve oncology products.

Italy has developed a website (<http://antineoplastici.agenziafarmaco.it/>) that contains a register to include data for monitoring patients who are receiving medicines under a RSS. In this sense, the report of this register (2007²²) include the medicines that are registered and some of the outcomes that were being monitored, for example, the number of treated patients, the patients that have finalized the treatment and the reasons for stopping the treatment. On September 2007 (date of the report) only 4 medicines²³ were under a RSS, but the register has data from some other oncology medicines (Table 4). According to this report, for 12 medicines whose cost/benefit ratio could not be considered definitive when they first obtained marketing authorization, the AIFA has defined this monitoring program for contributing to create a cohort of patients to carry out a pharmacoepidemiology and pharmacoconomics studies. For the medicines that, at the time of marketing authorization, there is not enough results to know the real value of the new treatment, the real advantages for the patients are not enough clear and the price is very high for the National Health System, a RSS has been established.

²² Italian Medicines Agency 2008.

²³ Tarceva® (Roche), Nexavar® (Bayer Healthcare), Sutent® (Pfizer) and Sprycel® (Bristol Myers Squibb)

Table 4. Number of treated patient and causes for stop the treatment for some oncology drugs. Italy 2007

Oncology medicines	Number of treated patients	Patients that have finalized the treatment (%)	Causes for Stopping the treatment				
			Stopping the treatmeat by clinical decision	Progression	Death	Toxicity	Other
AVASTIN® (27/03/2006)	1967	481 (24.5)	98	241	26	53	63
ELOXATIN® (27/03/2006)	2818	1127 (40.0)	683	44	5	299	96
ERBITUX® (27/03/2006)	1711	714 (41.7)	53	525	43	52	41
FASLODEX® (27/03/2006)	2853	778 (27.3)	4	654	66	16	38
FOSCAN® (27/03/2006)	22	4 (18.1)	0	2	2	0	0
GLIADEL® (27/03/2006)	130	44 (33.8)	27	3	4	0	10
ZEVALIN® (27/03/2006)	184	51 (27.7)	47	0	0	0	4
TARCEVA® (02/08/2006)	3338	1040 (31.2)	5	603	265	73	94
HERCEPTIN® (27/10/2006)	2156	144 (6.7)	79	14	0	38	13
NEXAVAR® (21/12/2006)	662	128 (19.3)	0	55	21	31	21
SUTENT® (21/12/2006)	797	117 (14.7)	0	41	28	23	25
SPRYCEL® (04/06/2007)	172	5 (2.9)	1	0	3	0	1

Source: Aifa. Registro Farmaci Cncologici Sottoposti a Monitoraggio Rapporto Nazionale 2007

2.1.5 Lithuania

In Lithuania the use of RSS is restricted to the financially-based model which consists of price volume agreements between the payer and manufacturers. These agreements are signed between manufacturers and the National Health Insurance Fund (by order of the Minister of Health).

In the case of oncology medicines, there is only one active ingredient involved: Topotecanum. The products that are reimbursed are: Tablets - Hycamtin 1 mg N10 and Hycamtin 0.25 mg N10; Injection - Hycamtin 4mg/vial N1 and Hycamtin 1mg/vial N1. The marketing authorisation holder is GlaxoSmithKline.

An outline of the agreement procedure is described. First, the price is estimated and negotiated considering the predicted demand of the product; second, the companies must pay back (to the National Insurance Fund) the amount of money that corresponds to the eventual overuse of the agreed upon volume; and third, the agreement is negotiated annually according to projected product demand and the country's economic situation.

These price volume agreements are mainly aimed at controlling the overall public pharmaceutical budget.

2.1.6 Slovenia

In Slovenia an oncology medicine risk sharing scheme was set up in 2010 for Iressa (Gefitinib), a medicine from Astra Zeneca. It is a short-term effectiveness scheme which consists of a rebate plus free supply of the medicine for the first 2 months of treatment. Responders are covered by Social Health Insurance.

The two main aims of introducing this scheme in Slovenia are to control overall budget and finance pharmaceutical which are considered or proven cost-effective.

2.1.7 United Kingdom

Together with Italy, the United Kingdom is the European country that has implemented the largest number of RRS for oncology medicines in recent years. In the UK, the RSS (usually referred to as Patient Access Schemes) are negotiated within the framework of the general voluntary agreement between the Department of Health, and the Industry known as the Pharmaceutical Price Regulation Scheme (PPRS) since 2009, which is a 5 year non-contractual voluntary scheme.

The PPRS underwent deep reform in 2009, as a result of an evaluation by the Office of Fair Trading (OFT) that recommended the Government reform the PPRS by “replacing current profit and price controls with a value-based approach to pricing, which would ensure that the price of drugs reflect their clinical and therapeutic value to patients and the broader NHS”²⁴. The report indicated the circumstances where a RSS was recommended, such as “where data at the time of launch is insufficient to take an informed view on cost effectiveness”²⁵, or when “the appraising body determined that there was sufficient uncertainty about outcomes, there would be an opportunity to consider risk-sharing or ‘only in research’ recommendations”²⁶. The report generally assumed that RRS “can in principle help coordinate the expectations of the payer and manufacturers”²⁷.

As a result of this OFT report, the new PPRS defines a clear typology of Patient Access Schemes in the UK, consisting in two main types: financially-based schemes and outcome-based schemes. In the first case, the company does not alter the list price of the medicine but offers discounts or rebates linked to several variables, such as the number of patients treated, or the response of these patients to the treatment. In the second case, the outcome-based schemes have four different subtypes: proven value, price increase,

²⁴ Office of Fair Trading. The pharmaceutical price regulation scheme: an OFT market study. OFT, 2007. Pag 1.

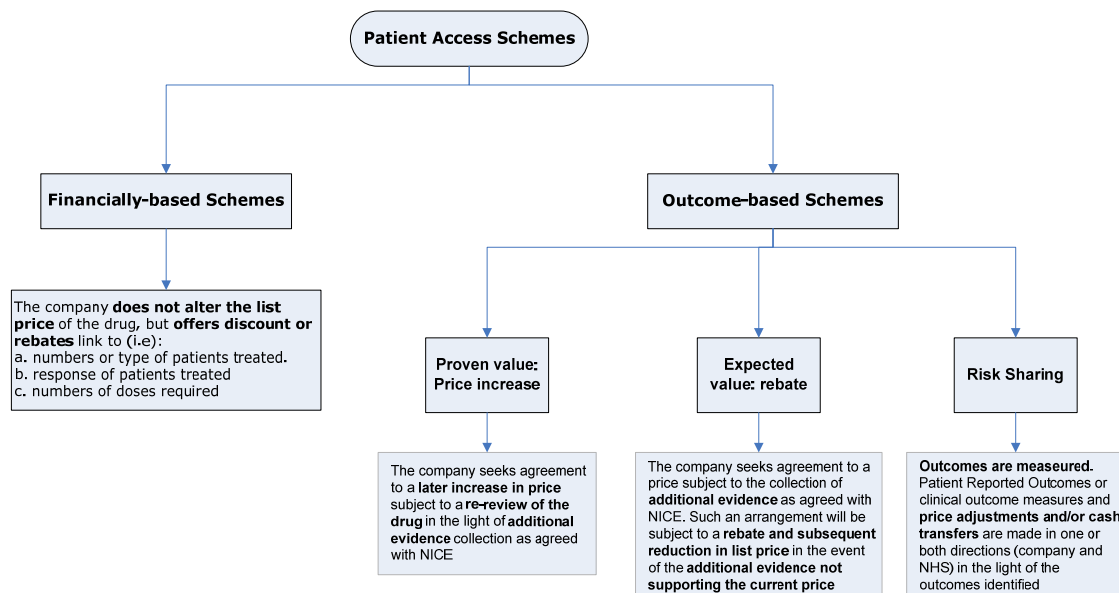
²⁵ Office of Fair Trading, *op. cit.* pag. 6

²⁶ Office of Fair Trading, *op. cit.* pag. 107

²⁷ Office of Fair Trading, *op. cit.* pag. 92

expected value rebate, and risk sharing. Extra details about these types can be found in the following graph (Figure 4).

Figure 4: Patient Access Schemes in the UK



Source: Pharmaceutical Price Regulation Scheme (PPRS) 2009

Several examples were provided by UK representatives to illustrate the extensive use of oncology RSS in their country. They included two examples of Utilisation Cap agreements, one with Yondelis (Trabectedin – Pharma Mar) and a second with Revlimid (Lenalidomide – Celgene). In both cases the agreement started in 2009 and is expected to expire in 2012. The case of Yondelis is a patient access scheme which caps on the overall cost exposure of the UK’s National Health System (NHS) at the average number of cycles received by patients in the trial²⁸. In the case of Revlimid, the NHS funds the once-a-day pill regime for two years, after which the company will cover any additional costs for as long as the patient requires treatment²⁹.

In both cases the main objective for introducing the scheme is to finance only cost-effective pharmaceuticals. In this sense, it is important to mention the key role that the National Institute for Health and Clinical Excellence (NICE) plays in these decisions. As the OFT report stated, NICE (and other regional Health Technology Agencies) “would undertake the cost effectiveness analysis needed for ex-ante pricing and associated ex-post reviews as well as risk-sharing schemes. For each drug appraised, one of the bodies would take a view on a cost effective price but pass its conclusions to a pricing unit in DH to negotiate the final terms with manufacturers, on behalf of the devolved health departments”³⁰.

Further two RS examples are manufacturer-funded treatment negotiations involving two oncology medicines: Tarceva (Erlotinib – Roche) and Sutent (Sunitib – Pfizer). The first

²⁸ http://www.pharmamar.com/pdf/NICE_EN.pdf (access on 20/01/2011)

²⁹ http://www.timesonline.co.uk/tol/life_and_style/health/article5614467.ece (access on 20/01/2011)

³⁰ Office of Fair Trading, *op. cit.* pag. 92

concerns a discount scheme applied at the point of invoice, which has the effect of equalising the overall costs of treatment of Tarceva with the comparator (docetaxel) in order to deal with the issue of uncertainty. The objective of the arrangement is to ensure that the total cost of treating the cancer (in this case, non-small cell lung carcinoma) will not increase through the use of Tarceva by the NHS. According to the NICE letter to Roche³¹, “The proposed discount would be both simple and straightforward to administer because Tarceva is provided and invoiced to NHS hospitals direct by Roche and therefore the treatment cost difference would be reimbursed via a direct reduction in the actual selling price to hospitals. There would be no practical issues of administration and no additional costs involved to the NHS. There would be no change to the published NHS List Price for Tarceva.” The discount is 14.5%.

The second manufacturer-funded treatment (Sutent) allows the NHS to reclaim the cost of the first month of treatment from the manufacturer, but the remaining treatment cost is covered by the NHS³².

The final example from the UK is a non-outcome based scheme (manufacturer funded treatment negotiation) where the manufacturer provides a free stock of the medicines (in this case, Sutent (Sunitinib) from Pzifer. The agreement began in 2009 and is expected to terminate in 2012.

The following figure displays a summary of all patient access schemes for oncology medicines in the UK (Figure 5) according to a NHS Devon³³.

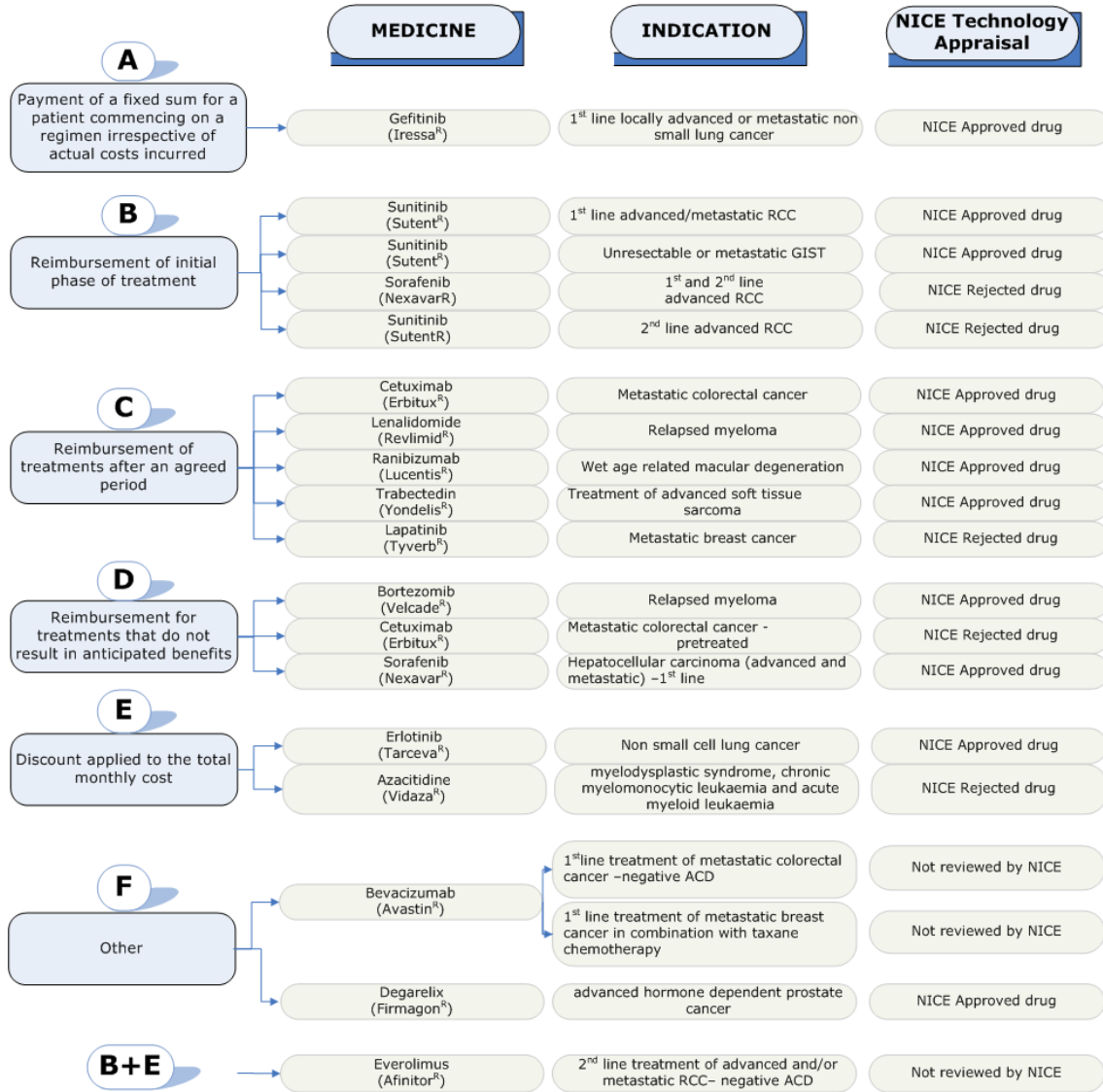
Table 5 summarizes the answers to the EMINet survey about Financial and Outcomes Agreements in Europe for Oncology Medicines.

³¹ <http://www.nice.org.uk/nicemedia/live/11714/41146/41146.pdf> (access on 20/01/2011)

³² <http://www.devonpct.nhs.uk/> (access on 20/01/2011)

³³ http://www.devonpct.nhs.uk/Treatments/Patient_Access_Schemes_Individual_Drugs.aspx (access on 20/01/2011)

Figure 5: Oncology Patient Access Schemes in the UK



Source: EMINet's compilation based on NHS Davon (<http://www.devonpct.nhs.uk/>)

Table 5: Financial and Outcomes Agreements in Europe for Oncology Medicines. Summary Table from the Answers to the EMINet Survey

COUNTRY	TYPE OF RSS AGREEMENT	YEARS	BRAND NAME/ACTIVE INGREDIENT/ MARKETING AUTHORIZATION HOLDER	BRIEF DESCRIPTION	OBJECTIVE
France	Price-Volume	2010-2015	Confidential	Price volume agreements are implemented via paybacks or price reduction, and are implemented to prevent minor and potentially reversible excess sales above the contractual thresholds..	To control budget
France	Manufacturer funded treatment negotiation	2008-2013	Naglazyme and Soliris	Under the agreement companies must supply their medicine to all patients who might benefit from it without restriction and pay back to the national health insurance system any turnover made above an agreed fixed ceiling (maximal budget).	To control budget
France	Conditional reimbursement price according to the results of clinical or observational studies	2016-2013	Glitazone	The reimbursement price would only be maintained if the drug achieves a higher ASMR price rating, depending on the results of observational/clinical studies. If the results of these studies are negative, the manufacturer is required to pay back the difference for past overpayments and must apply price reductions in the future.	To get additional data
Slovenia	Short term effectiveness	2010-	Iressa / Gefitinib	Basically this is a rebate, plus covering tests, plus donation of the medicine for the first 2 months of treatment. For responders, health insurance assumes full coverage.	To control budget/To finance cost-effective medicines
Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints.	2009-2011	Velcade / Bortezomib / - Jassen	Cost-sharing scheme based on requiring the manufacturer to pay back 50% of the expenses for all eligible patients for the first treatment cycle (6 weeks of treatments).	To control the budget / To finance cost-effective medicines / To get additional data

Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints.	2008-2011	Tasigna / Nilotinib / Novartis	The manufacturer is required to assume costs for the first month of treatment for non-responder patients.	To control de budget / To finance cost-effective medicines / To get additional data
Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints.	2006-2001	Tarceva / Erlotinib / Roche	50% price reduction for the first two cycles of therapy.	To control de budget / To finance cost-effective medicines / To get additional data
Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints	2009-2011	Nexavar / Sorafenib / Bayer	<i>Treatment of advanced renal cell carcinoma:</i> Risk sharing consisting of a 50% price reduction for the first 3 months of treatment. <i>Treatment of hepatocellular carcinoma:</i> Full price reduction for the first 2 months of treatment later reimbursed through credit notes for non-responders	To control de budget / To finance cost-effective medicines / To get additional data
Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints	2006-2011	Sutent / Sunitinib / Pfizer	50% price reduction for the first three months of treatment.	To control de budget / To finance cost-effective medicines / To get additional data
Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints	2008-2011	Torisel / Temozolomide / Wyeth	The medicine is freely provided by the manufacturer for the first two months of treatment and only for non responders	To control de budget / To finance cost-effective medicines / To get additional data

Italy	Guaranteed performances assessed through clinical evaluation of specific endpoints	2008-2012	Vectibix /Panitumumab / Amgen	Risk sharing scheme requiring the manufacturer to pay back 50% of the costs for non-responder patients (evaluation after 2 months of treatment).	To control de budget / To finance cost-effective medicines / To get additional data
Lithuania	Price - Volume	2009-2012	Topotecanum / Hycamtin / GlaxoSmithKline.	The main steps involved in the agreement are: 1. Price volume is estimated according to demand for the drug. 2. The manufacturer pays back the National Health Insurance Fund the amount of money that exceeds the price volume estimate. 3. Price volume is renewed annually according to demand for drug and the country's economic situation.	To control budget / To finance cost-effective medicines
UK	Utilization caps	2009-2012	Yondelis / Trabectedin / Pharma Mar	This is a Dose Cap scheme.	To finance cost-effective medicines
UK	Utilisation Cap	2009-2012	Revlimid / Lenalidomide / Celgene	This is a Dose Cap scheme.	To finance cost-effective medicines
UK	Manufacturer-funded treatment negotiation	2009-2012	Tarceva / Erlotinib / Roche	This is a discount scheme applied at point of invoice.	To finance cost-effective medicines
UK	Outcome-based scheme	2008-2011	Velcade / Bortezomib /Jansen Cilag	Refund if patient does not respond, determined by a protein test.	To finance cost-effective medicines
UK	Manufacturer-funded treatment	2009-2012	Sutent / Sunitinib / Pfizer	This scheme provides free stock.	To finance cost-effective medicines

Portugal	Non-outcomes-based models	2007-2009	<ul style="list-style-type: none"> 1) Sprycel/Dasatinib / Bristol Myers Squibb 2) Nexavar / Sorafenib/Bayer 3) Revlimid/Lenalidomide / Celgene Europe 4) LucrinDepot/Leuproreline / Abbott 5) Litak / Cladribine/Lipomed GmbH 6) Vectibix/Panitumumab / Amgen 7) Xeloda/capecitabine / Roche 8) Yondelis / Trabectedine/Pharma Mar 9) Torisel / Temsirolimus/Wyeth Europe 10) Evoltra / clofarabine / Genzyme Europe 	<p>According to legislation for each new medicine approved for hospital use, an agreement is made with the marketing holder before its introduction in hospitals. This agreement is made by product and includes the maximum price approved and a maximum budget per year. This maximum budget is based on the estimated population that will use the medicine. If the budget is surpassed, the marketing holder should pay back the difference. These agreements are in effect for a period of 2 years and at the end of this period a re-evaluation of the conditions to maintain or change the agreement is made.</p>	To control budget / To finance cost-effective medicines
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Source: Answers from Countries' representatives to an EMINet online survey (2010)

2.1.7. Evaluation of the impact of risk-sharing schemes for oncology products

An evaluation is the final step in the RSS design process. Evaluations help identify “lessons learned” that could help improve the design of future schemes. The absence of an evaluation process by the different stakeholders involved undermines the effectiveness of such schemes. Many countries have not included any plan aimed to evaluate the schemes they have in place³⁴.

According to the answers received as part of our survey, only three countries in Europe (France, Italy, and Portugal) have carried out an evaluation of their RSS. Moreover, since the introduction of different risk-sharing schemes in Europe is a relatively new phenomenon and most of them are still unfinished, only a handful of formal impact evaluations have currently been completed and made available.

In the case of France, and according to survey answers, the evaluation done on RSS was related to a general agreement between CEPS and the pharmaceutical companies which defined the annual repayments that pharmaceutical companies were required to make when they did not meet their established objectives. Those objectives were defined annually and were based on the trigger rates fixed by Parliament (known as K rates). The only evaluation information that the CEPS’ annual reports (2008 and 2009) provide in that regard focuses on the net amount of clawback payments that companies paid back: €260M in 2008³⁵ and €236 in 2009³⁶. No additional information is available.

The CEPS’ reports also contain a section (1.4.2) that addresses “volume clauses” (schemes that monitor sales volumes to ensure that a drug is only being used for the indications for which it has received its ASMR). However, the information contained in those reports is limited to a description of the system and doesn’t provide any information about evaluations.

In Italy, the AIFA (Italian Medicines Agency) has plans to evaluate two aspects of the schemes that have been implemented there: the economic impact and the geographic variations of results, the latter being a key issue in Italy since health care competences have been given to the Regions. Our literature review encountered a recently published article³⁷ that presents some results related to the different oncology risk-sharing schemes that have been implemented in Italy in the last years. It showed, for example, that for 14 oncology products authorized to be marketed in Italy in 2006 and 2007, the number of products available in the regions varied from 12 medicines in Lombardia and Piemonte to 7 medicines in Molise.

³⁴ McCabe C, 2010

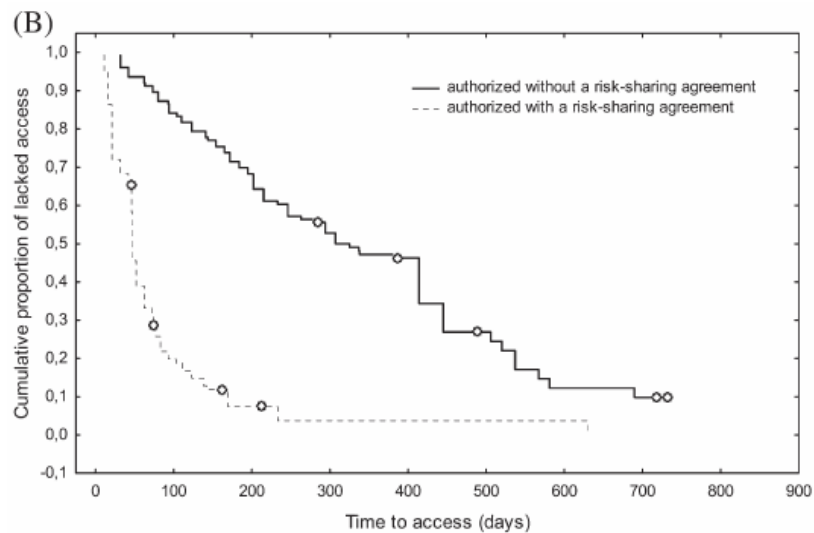
³⁵ CEPS 2008, *op cit.* Pag. 27

³⁶ CEPS 2009, *op cit.* Pag. 27

³⁷ Russo P, 2010

Additionally, the same article affirms that an oncology product authorized under a risk-sharing agreement benefits from earlier patient access by a mean shortening of 256 days by a mean shortening of 256 days in Italy in comparison to products with no agreement (83.7 days v. 342.7 days) Figure 6 illustrates this.

Figure 6: Analyses of time to regional patient access according to the authorization with or without a risk-sharing agreement



Source: Russo et al.

In that same article, the authors attempted to identify potential predictors of the time to regional patient access by using a regression model (Figure 7). The regression database consisted of 14 oncology products in each one of the 21 Italian regions. According to this article, “Several variables significantly predicted the time to regional patient access. The strongest predictor was that considering the oncology products with a defined risk-sharing agreement in the context of AIFA authorization.”³⁸

³⁸ Russo et al. *op cit.* pag. 2084

Figure 7: Analysis of Time to Patient Access Predictors in Italian Regions for Oncology Products

Predictors	Crude HR (95% CI)	Adjusted HR (95% CI)	P value
Oncology product labeled as an orphan drug (ref. No orphan drug)	1.21 (0.90–1.62)	1.34 (0.76–2.37)	0.312
Oncology product introduced in a region with a compulsory regional formulary (ref. introduction in a region without a compulsory formulary)	0.77 (0.58–1.02)	0.60 (0.45–0.80)	0.001
Oncology product authorized with a risk-sharing agreement (ref. authorization without a risk-sharing agreement)	5.95 (4.27–8.30)	12.1 (7.22–20.40)	<0.001
Forecast of the economic impact for the NHS in the first 3 years of commercialization (log-transformed euros)	1.21 (1.00–1.43)	0.70 (0.54–0.92)	0.010
Ex-manufacturer price after AIFA negotiation (log-transformed euros)	1.01 (0.93–1.10)	0.73 (0.60–0.89)	0.002
Forecast of the annual cost per patient at negotiated price (log-transformed euros)	1.11 (1.02–1.20)	0.95 (0.77–1.17)	0.628

Model's statistics: chi-square test (df 6) = 152; $P < 0.001$.

HR, hazard rate; CI, confidence interval; AIFA, Italian Medicines Agency (Agenzia Italiana del Farmaco); NHS, National Health Service.

Source: Russo et al.

No additional information is available on either the impact or the results of many of these European schemes. A recent literature review³⁹ indicated that many of the RSS did not report “study outcomes” or “policy implications”.

³⁹ 34.Stafinski T et al. *op. cit.* pag. 123

2.2 COUNTRIES WITHOUT RISK-SHARING SCHEMES ON ONCOLOGY MEDICINES

According to the results of this EMINet survey, twelve of the 18 European countries which answered the survey have not implemented any RSS on oncology (Austria, Denmark, Finland, Iceland, Ireland, Latvia, Malta, Norway, Poland, Romania, Spain, and Sweden). See Figure 3.

This statement, however, requires some clarification. Austria, for instance, reported the use of conditional reimbursement, which is a type of RSS. In a 2007 analysis of pricing and reimbursement in Europe⁴⁰, other countries, such as Denmark, Latvia, Norway, Spain and Sweden, reported the use of price volume agreements – an example that the present report considers to be one form of RSS - for several medicines without specifying whether the agreements involved any oncology drugs. Also it is important to note that some cases of RSS for oncology medicines mentioned in the literature have not been reported by countries in the present study, one example being Sweden, where according to the literature⁴¹, the Human Papillomavirus quadrivalent vaccine is reimbursed to reduce cervical cancer. In addition, an evidence development scheme is in place whereby the manufacturing company agrees to provide additional data related to ongoing and planned studies to determine the vaccine's long-term cost-effectiveness (data provided every 6 months starting from 01/10/2007). These findings suggest that in order to make valid comparative international analyses of RSS, a previous consensus is needed on terminology and typologies

The survey also included some questions on whether the countries intended to implement these innovative contracts in the near future. Two countries (Iceland and Sweden) reported that they did not have any defined plan. However, three countries reported that they are planning to implement RSS for oncology medicines: Poland reports that a draft of the new Act on Reimbursement contains the legal basis for implementing RSS; in Malta the Directorate of Pharmaceutical Policy and Monitoring (DPPM) will make a recommendation to the Government Health Pharmaceutical Services (GHPS) to implement RSS following the practice of NICE; and Latvia is also considering the implementation of RSS.

Other countries clearly stated that they do not foresee these kinds of agreements in the near future. Such is the case for Austria, Ireland and Norway (where no explicit legislation on that issue exists), Finland (where some pharmaceutical companies have proposed to implement RSS, but legislative changes would require in order to do so), Romania (where there is no official initiative to implement these schemes), Denmark or Spain (where some regional authorities have expressed an interest in these initiatives and are closely following their use abroad, but where no plans exist to implement them any time soon).

⁴⁰ Espín J, 2007

⁴¹ Carlson JJ, 2010

2.3. OPINION ABOUT RISK-SHARING SCHEMES BY POLICY MAKERS IN EUROPE

2.3.1 Opinion by the countries that have implemented oncology risk-sharing schemes

European policymakers highlight several arguments to justify and encourage the use of these schemes:

- To improve the health system's sustainability without denying access to medicines for needed treatment.
- To deal with uncertainties regarding a medicine's effectiveness
- Faster access to medicines
- An alternative if it is not possible to obtain lower prices for certain medicines
- As a means to promote the appropriate use of medicines
- To avoid unnecessary risks to patients and unneeded expenses
- To take a pricing and/or reimbursement decision when the information about the clinical results or the health outcomes is weak
- To help keep the overall budget under control
- To reimburse only pharmaceuticals which are cost-effective
- To avoid excluding some medicines from reimbursement
- To provide an opportunity to collect data on real use
- To facilitate quick patient access once the medicine has received EMA approval

They also identify some limitations and caveats, for instance:

- Additional work time, mainly for hospital pharmacists
- The need to have a well designed and easy-to-use computer system
- The generation of biased/misleading prices for countries using international/external reference prices
- The need to ensure that the cumulative burden of schemes is manageable for the health system

2.3.2 Opinions by countries that have not implemented oncology risk-sharing schemes

Many countries in Europe do not see any clear advantages in adopting these new innovative contracting instruments and have expressed several reservations about implementing them in the near future.

Opinions can be classified mainly into two groups, 1) countries that do not see any clear advantages in using such instruments and, 2) countries that do see advantages and will probably introduce these schemes in the future

- 1) Countries that do not see any clear advantages in the use of risk-sharing schemes (Denmark, Norway, Spain and Sweden) give the following arguments:
 - a. RSS are, in principle, considered as a good tool, but the implementation is considered difficult (for example, substantial resources are required for following up on the schemes)
 - b. The investment in RSS will probably not override benefits and results
- 2) Countries that see the advantages and will probably introduce these schemes in the near future (Finland, Ireland, Island, Malta and Poland) offer the following justifications:
 - a. To control future costs
 - b. As a way to strike a balance between lobbying pressures from the industry for quicker reimbursement for innovative products, on the one hand, and the limited allocations of government resources for health budgets, on the other, so that patients can benefit from the latest technologies available in the safest framework possible
 - c. Reimbursement must be based on health outcomes in order to ensure value for money

Several other general limitations and caveats were pointed out:

- An appropriate and sufficient legal basis is needed
- Potential problems with getting money back from the manufacturer
- Considerable resources are needed to ensure adequate implementation
- RSS must be based only on health outcomes to ensure value for money

Conclusions

This study confirms that over the past few years the use of innovative contracts or schemes for oncology medicines has increased in Europe. While financially-based schemes represent the most widely implemented instruments used by countries interested in beginning to implement innovative contracts, there is a trend towards the increased use of newer outcomes-based schemes. While this study has focused specifically on oncology products, its main conclusions can be extended to other types of medicines as well.

There are numerous reasons for the increased number of schemes that have been implemented recently, but perhaps one of the most important ones resides in the need to identify new ways of financing high-cost medicines in an environment of considerable uncertainty: uncertainty with regard to a product's clinical results as well as its impact on the public pharmaceutical budget. An additional and equally important reason is that RSS makes it possible for negotiations to take place and this can reduce the cost of medicines within specific countries without formally changing the official or list price of the medicine. This point is an essential one for the industry since it helps avoid the spillover effects of low prices through international reference pricing and parallel trade.

Nonetheless, no common approach exists across countries to deal with these new schemes for financing oncological medicines. In fact, differences in the design and implementation of such instruments tend to predominate over similarities, thus making it even more difficult to reach any general conclusions on how they can best be implemented. One contributing factor to this is the complete absence of any commonly accepted definition for what a risk sharing scheme is or is not - as evidenced in the answers to the online survey prepared for this study. Countries have different views on the classification schemes used in this study.

It is important to note that the use of any kind of risk-sharing scheme (whether it be financial- or outcomes-based), along with the broad array of rebates, discounts, paybacks, free doses, etc. associated with them, have implications for other policy practices. For example, as mentioned earlier, the use of RSS can have a distorting effect on external price referencing because the prices disclosed on existing public websites will not reflect the real transaction price. In fact, this seems to be one of the main incentives for pharmaceutical companies either to promote or be willing to accept these new schemes in the European context. In this context, many countries use prices from the UK and Italy as references; both these countries have introduced a number of innovative schemes in recent years. RSS can also act as a barrier to parallel trade, since wholesalers could not effectively obtain the medicines at prices paid by insurers and providers involved in RSS. Given the current situation, it could be useful to ask whether other reasons, not strictly related to efficiency, exist that prompt manufacturers and policy-makers to introduce these new schemes.

An effort must be made to estimate the real opportunity costs implicit in implementing these new risk-sharing schemes while at the same time taking into account their impact on external price referencing. In the European context knowledge about these schemes is probably sufficient, with the exception of increasingly more frequent confidential

agreements, which makes it possible for every country to obtain information on products for which a scheme exists. Although there is an increased tendency outside of Europe to use European medicine prices as a reference (South America, Middle East, etc), it is likely that many of those countries are less familiar with the inner workings of these innovative schemes. The combined effect of all these factors makes it even more important for policy-makers to know the real price paid since this will ensure the fair use of international reference pricing.

According to this study's results, some countries have begun evaluating how RSS have been implemented; however, no final results have as yet emerged. It is probably still too early for that, considering the relatively short existence of these instruments.

Unlike other diseases, the possibilities for gathering data on appropriate indicators to measure health outcomes for cancer patients are much better. One example could be the evolution of the M protein used to assess Bortezomib (Velcade) for multiple myeloma, one of the older outcomes-based schemes traditionally cited by the literature.

For some countries the use of risk-sharing schemes has allowed access to oncological medicines that, according to other criteria, would have been excluded from financing, possibly leaving certain legitimate health needs unattended (for example, their incremental cost effectiveness ratio is higher than the threshold proposed in the UK). For others countries RSS could represent a procedure to accelerate market access to certain medicines whose clinical benefits have not been confirmed sufficiently through clinical trials. For the majority, it is simply another instrument for overall budget control. Consequently, we are witnessing not only the access of new oncology medicines to the market, but also the improved monitoring of their use.

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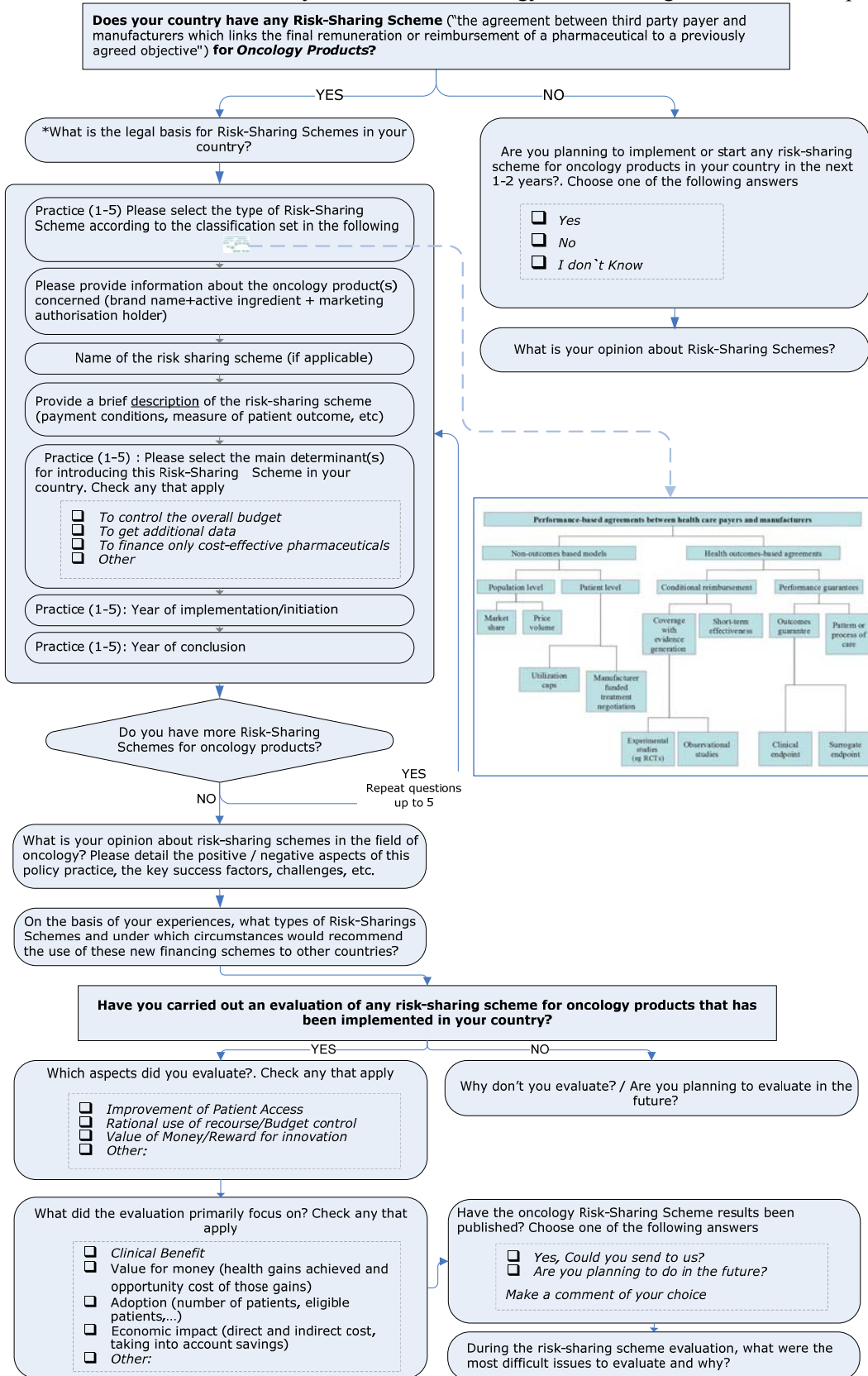
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Annexes

Annex 1: Online Survey Structure on Oncology Risk-Sharing Schemes in Europe



Annex 2: List of informants

Country	Name of Informant	Organization / Ministry	Unit
Austria	Gernot Spanninger	Ministry of Health	III/B/3
Denmark	Elisabeth Thomsen	Danish Medicines Agency	Executive Secretariate / Reimbursement Department
Finland	Ulla Kurkijärvi	Ministry Of Social Affairs And Health	Pharmaceuticals Pricing Board
France	Danielle Golinelli - Isabelle Cheiney	Ministry of Health	Directorate General for Health - Directorate for Social Security
Iceland	Runa Hauksdottir	Ministry of Health	Icelandic Medicine Pricing And Reimbursement Committee
Ireland	Ciara Pidgeon	Department of Health and Children	Primary Care
Italy	Pietro Folino Gallo	Italian Medicines Agency	Monitoring Utilisation And Expenditure And HTA
Italy	Simona Montilla	Italian Medicines Agency	Office For Pharmaceutical Policy
Latvia	Janis Innus	The Centre of Health Economics	Economic Evaluation
Lithuania	Ieva Greičiūtė	National Health Insurance Fund	Medicines Reimbursement Department
Malta	Isabelle Zahra Pulis	Ministry of Health, the Elderly and Community Care	Directorate of Pharmaceutical Policy and Monitoring
Norway	Janicke Nevjar	Norwegian Medicines Agency	Department Of Pharmacoeconomics
Poland	Jakub Adamski	Ministry of Health	Drug Policy And Pharmacy Department
Portugal	Isaura Vieira	INFARMED - National Authority of Medicines And Health Products, I.P./ Ministry of Health	Medicinal and Health Products Economics Department
Romania	Bogdan Grigore	Ministry Of Health	Pharmaceutical Policy Directorate
Slovenia	Jurij Fürst	Health Insurance Institute of Slovenia	Dpt. For Medicinal Products
Spain	Mercedes Martínez Vallejo	Ministry of Health and Social Policy	Directorate-General for Pharmacy and Healthcare Products
Sweden	Anna Märta Stenberg	Dental and Pharmaceutical Benefits Board	
United Kingdom	Cris Sowden	Department of Health	Medical Directorate