European Dermatology Health Care Survey 2013

Short Report

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1 Background

The structure of health care systems, responsibilities and thus processes care are extensively variable between the European countries. Little is known about the impact of these differences treatment and health care outcomes of skin diseases.

2 Objectives

This study supported by DDA aimed to evaluate the variations, in health care systems concerning skin diseases, to explore the professional areas of dermatologists and dermato-venereologists access to health care and national approaches to improve diagnostics and treatment in 33 European countries. In particular, conclusions of health care disparities on the German dermatology specialist system were obtained.

3 Methods

A dermatology health care survey was conducted using a standardized paper-based questionnaire in 33 European countries. A panel of 42 delegates of the section dermatology and venereology of the EUMS (European Union of Medical Societies) provided country country-specific information. By use of bibliographical research, we additionally collected data about the structure of national health systems, their financing and the access to primary and secondary care as well as epidemiological features of skin diseases. The plausibility of answers was further checked by comparison with desk research including statistical data from several sources.

4 Results

4.1 Participants

Delegates of the section dermatology and venereology of the EUMS were asked to complete a standardized paper survey containing questions on the national dermatological health care situation. 42 questionnaires containing data of 33 countries were included into analysis. N=37 participants (88.1 %) were dermatologists. Five participants (11.9 %) had another profession. Therein, two participants hold the specialty of venereology. Participants were asked about their professional background. 20 participants (47.6 %) worked in a hospital, 12 (28.6 %) in a private practice. 8 (19.0 %) participants worked both in a practice and in a hospital. In the group of dermatologists working in a hospital n=9 indicated that they worked in an academic hospital, n=1 in another public hospital and n=3 in private hospitals.

4.2 Health Systems

In most European countries, a national health system with basic coverage of health care exists or a statutory health insurance cover health care to nearly all inhabitants. Only in a few countries coverage is incomplete (Turkey, Bulgaria and Cyprus). For Russia, a universal coverage is postulated by law but no statistical data of actual coverage are available.

Table 1: Reimbursement in health systems

	National health system	Statutory health insurance	Private health insurance	Self-payment
Austria		✓	✓	
Belgium	✓			
Bulgaria	✓		✓	✓
Croatia	✓			✓
Cyprus			✓	✓
Czech. Rep.		✓		
Denmark	✓			
Estonia	✓			
Finland	✓			
France		✓	✓	
Germany		✓	✓	✓
Greece	✓		✓	✓
Hungary	✓			
Iceland	✓			✓
Ireland	✓		✓	✓
Italy	✓			
Latvia	✓		✓	✓
Lithuania	✓		✓	✓
Luxembourg	✓			✓
Malta	✓		✓	✓
Norway	✓			
Poland	✓		✓	✓
Portugal	✓		✓	✓
Romania	✓			
Russia		✓		✓
Slovakia	✓	✓		✓
Slovenia	✓			✓
Spain	✓			
Sweden	✓		✓	✓
Switzerland		✓	✓	✓
The Netherlands			✓	
Turkey	✓		✓	✓
United Kingdom	✓			

The impact of private health insurance (PHI) regimen differs markedly: On the one hand, PHI is nearly absent in a few countries (Slovakia, Iceland, Turkey and Bulgaria), on the other hand, in the Netherlands, France, Switzerland and Slovenia >80 % of inhabitants have contracted a private health insurance. Primary private health insurance is only common in Austria, Cyprus and Germany.

4.3 Dermatological specialists

The number of dermatologists per one million inhabitants is impressively varying among the European countries. Numbers below the average were found in particular in Scandinavia, UK and other gatekeeping countries while central and some Southern European countries have much higher numbers.

Table 2: Total number of dermatologists per 1 million inhabitants

	Dermatologists per 1 million inhabitants (official data)	Number of dermatologists per 1 million inhabitants (survey)	Number of dermatologists: relative difference (%)
Austria	85	80.87	5.10
Belgium	65	60.65	7.17
Bulgaria	49	51.99	-5.76
Croatia	43	41.05	4.76
Cyprus	79	55.02	43.59
Czech. Rep.	82	82.04	-0.05
Denmark	28	25.62	9.30
Estonia	57	53.14	7.26
Finland	36	17.78	102.50
France	63	63.93	-1.45
Germany	62	60.88	1.84
Greece	100	97.02	3.07
Hungary	50	50.46	-0.91
Iceland	53	52.67	0,63
Ireland	15	10.74	39.72
Italy	70	65.19	7.39
Latvia	59	59.95	-1.59
Lithuania	65	58.46	11.19
Luxembourg	68	63.77	6.63
Malta	31	28.93	7.15
Norway	26	26.07	-0.26
Poland	31	29.78	4.10
Portugal	31	30.08	3.04
Romania	38	38.80	-2.06
Serbia	48	48.10	-0.21
Slovakia	81	81.22	-0.28

Slovenia	31	34.00	-8.82
Spain	26	65.11	-60.07
Sweden	38	35.27	7.74
Switzerland	53	45.32	16.95
The Netherlands	33	31.62	4.38
Turkey	25	23.71	5.46
United Kingdom	38	17.33	119.22

The mean percentage of dermatologists related to the total of practicing physicians was 1.5 % and ranged from 0.6 % in Ireland to 3.4 % in Cyprus. Countries with obligate GP referral in advance to a dermatologist showed lower numbers of dermatologists. The organizational structure of health care provision is reflected by the distribution of dermatologists in hospitals and private practices. While in the Netherlands and in the United Kingdom, private practices are nearly absent, central and Eastern European countries a high proportion of dermatology work in private office.

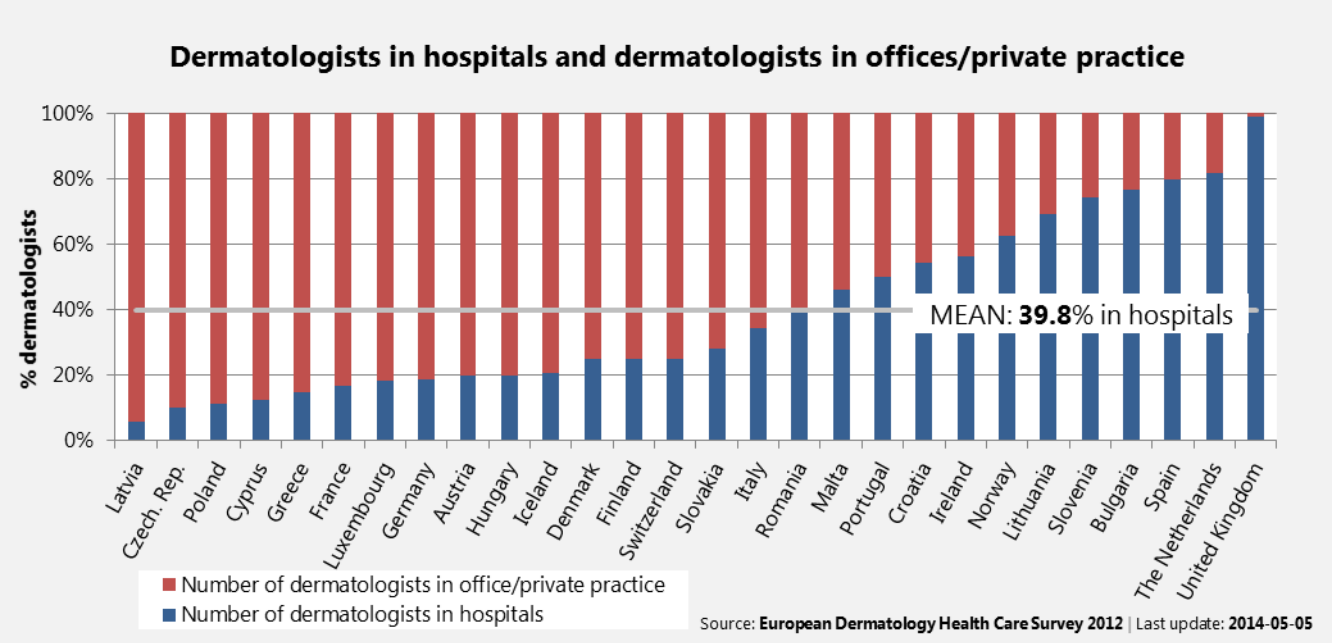


Figure 1: Dermatologists in hospitals and dermatologists in offices/private practice

4.4 Health care institutions

Like the differences in number of dermatologists, the structure of health care institutions differs. In France, the UK, the Netherlands and some Eastern European countries, hospitals with dermatological outpatients are numerous while dermatological outpatient care in Germany, Austria, the Czech Republic and Poland is strongly dominated by practices.

A high number of hospitals with dermatological outpatients was found in the Netherlands, the United Kingdom and in Spain. Much lower numbers were estimated in Northern European countries (Denmark, Finland and Latvia).

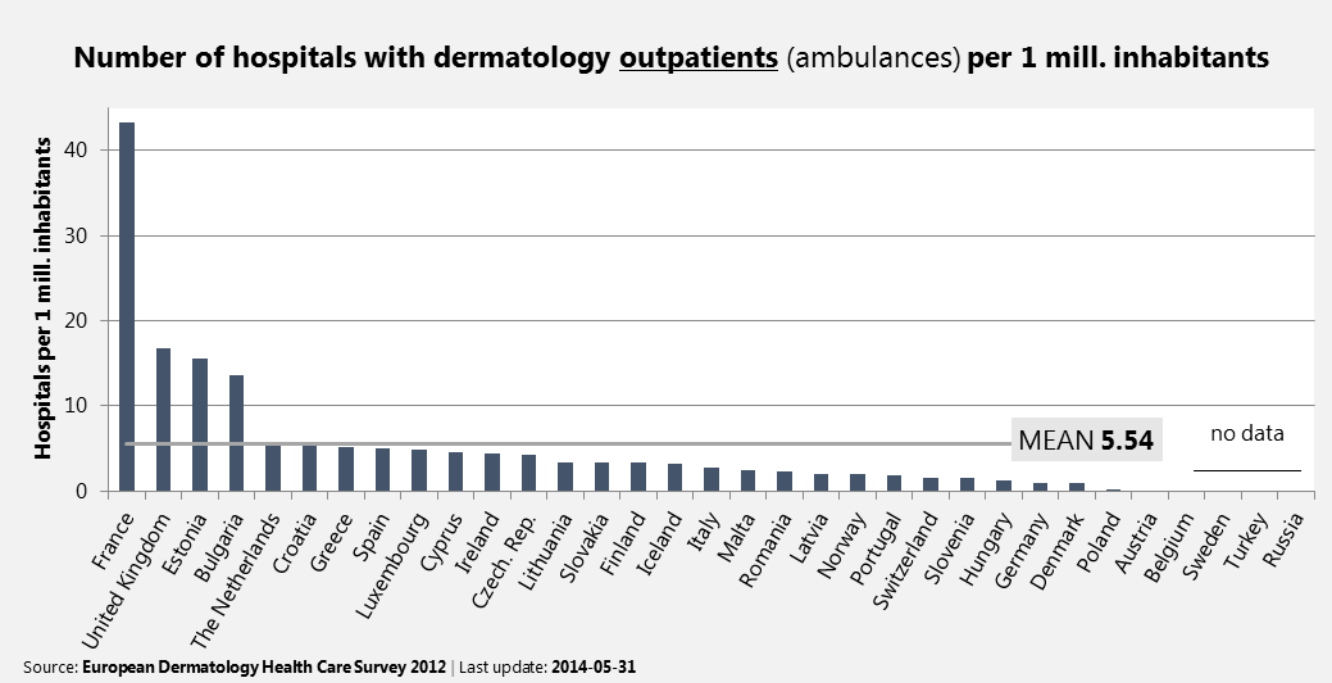


Figure 2: Number of hospitals with dermatology outpatients per 1 mill. Inhabitants

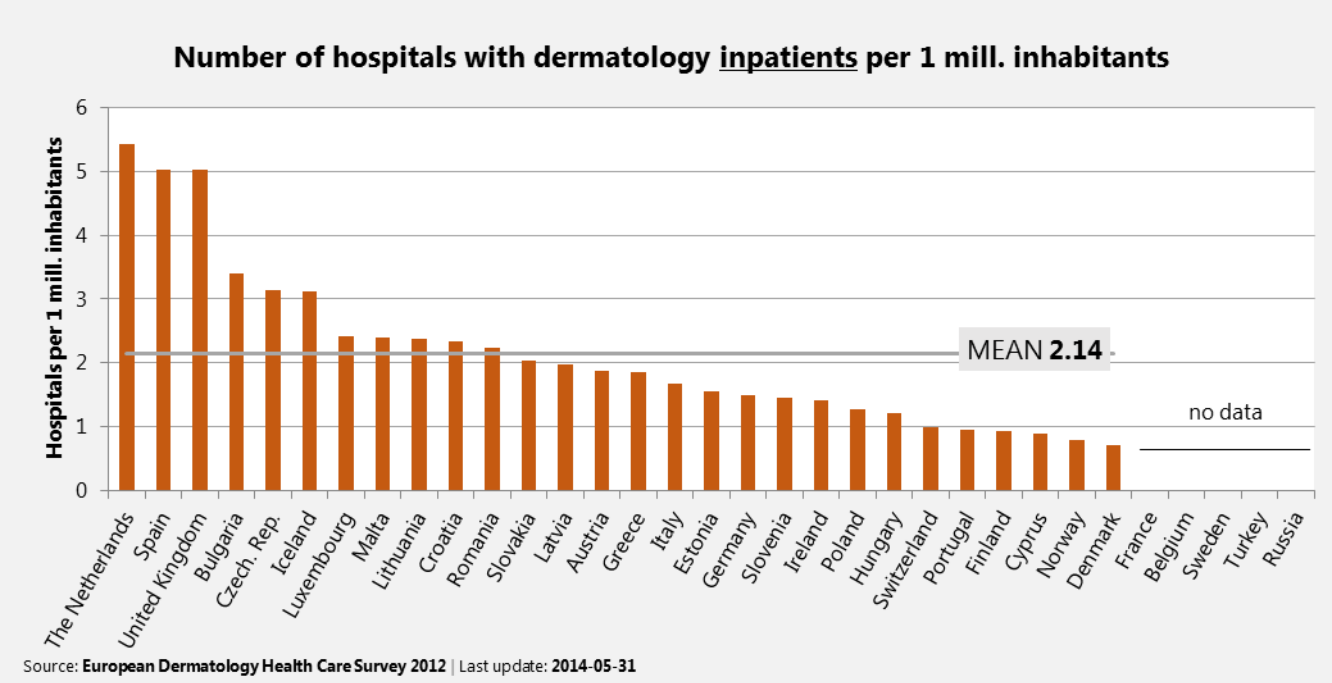


Figure 3: Number of hospitals with dermatology inpatients per 1 mill. inhabitants

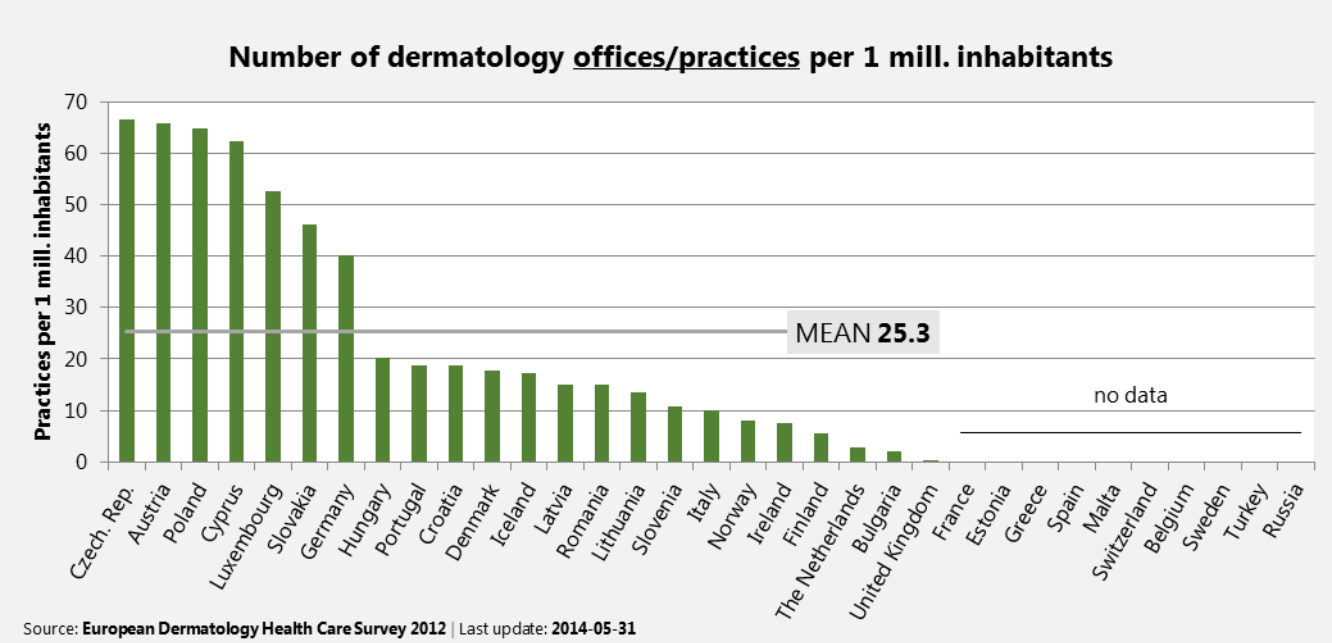


Figure 4: Number of dermatology offices/practices per 1 mill. inhabitants

4.5 Access to dermatological health care

The options to access dermatological care and the choice of physicians were difficult to enquire for all countries. In some cases, the answers of the participants were contradictory to the results of desk research. For analysis, we used the most reliable information. In most countries, a direct access is possible as a matter of principle but often requires self-payment or enhanced co-payments. In some countries, a direct access is excluded by the preconditions of the health system (e. g. the Netherlands and the United Kingdom).

4.6 Waiting times

We evaluated by questionnaire the waiting times for regular visits, emergency care and skin cancer surgery as well as allergy tests. Waiting times widely differed in all categories. For Greek and Bulgarian patients, immediate treatment seems to be possible. In the United Kingdom (96 days), in Slovenia (112 days) and in Ireland (133 days), patients have to wait on average longer than three months to see a dermatologist. Waiting times for a regular visit showed a moderate negative correlation with the number of dermatologists per one million inhabitants.

Figure 5: Waiting time: regular visits (days)

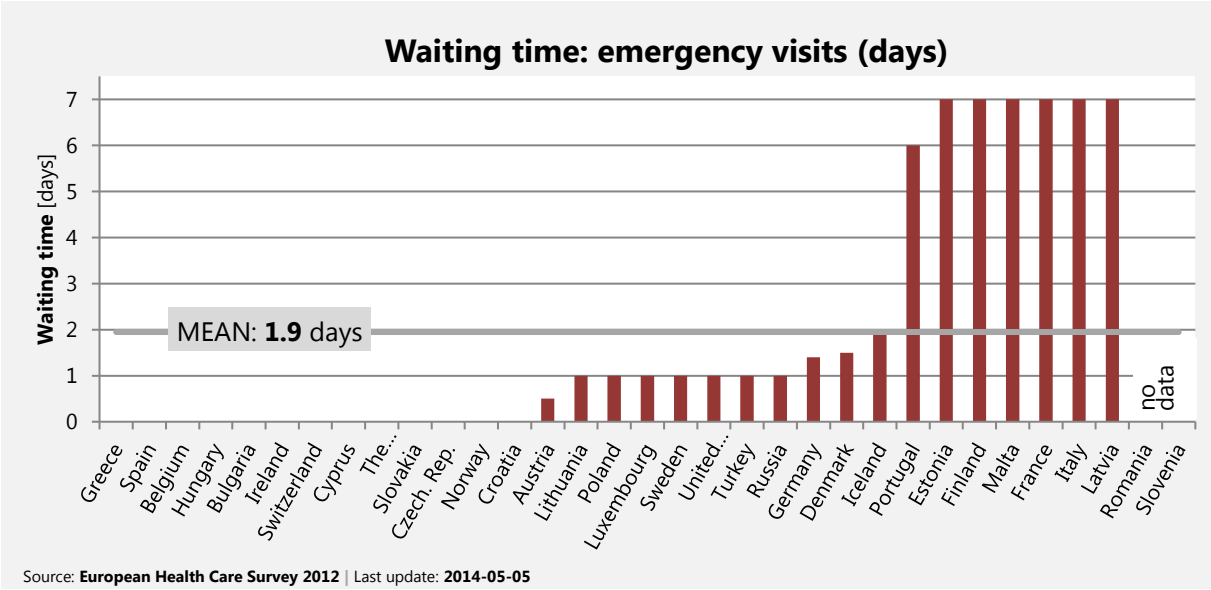


Figure 6: Waiting time: emergency visits (days)

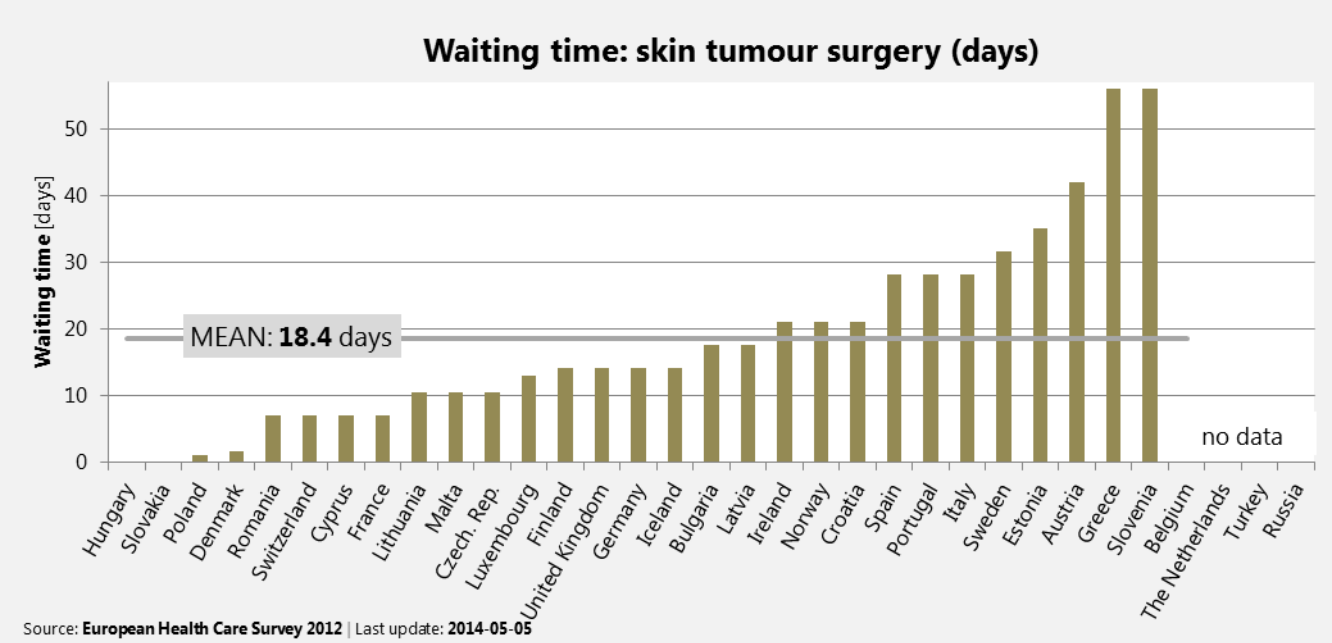


Figure 7: Waiting time: skin tumour surgery (days)

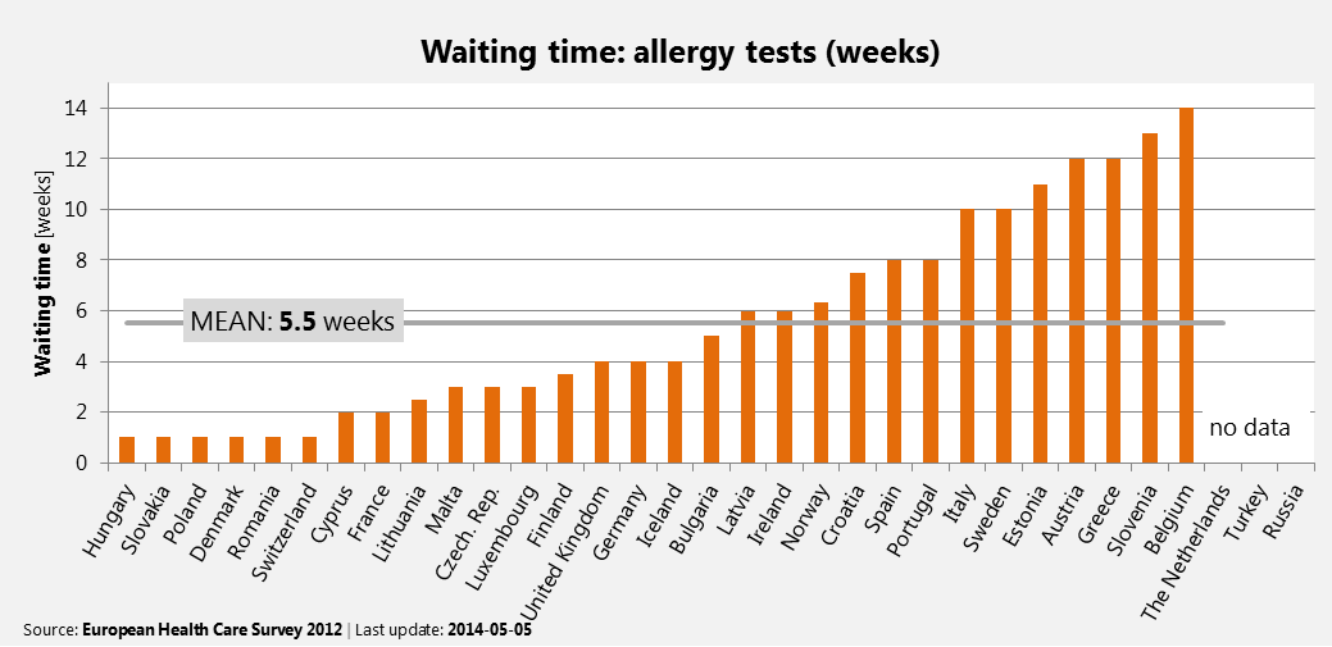


Figure 8: Waiting time: allergy tests (weeks)

4.7 Drug prescription by dermatologists

The prescription behavior of drugs for psoriasis differed considerably between countries. Nearly all dermatologists (98.1 % ± 5.1 %-pts. standard deviation [SD]) prescribe topical drugs. In contrast, the variation was much higher for individual formulations. In some countries, individual formulations are very common (including Spain, Austria, Belgium and the UK) while other countries show very low prescription rates (e. g. Poland and Norway). The rates of dermatologists prescribing for systemic drugs ranged from 5-10 % in Greece and Cyprus to 100 % in some Northern European countries and Austria. The prescription rate for biologics was lower compared to other drugs for psoriasis (21.1 % ± 19.2 %-pts. SD). The highest proportion of dermatologists prescribing biologics was found in the UK (70 %). The proportion of dermatologists prescribing biologics positively correlated with the annual health care expenditures. In general, lower prescription rates were found in countries with fixed budgets for prescription of biologics and when prescription was limited to hospitals and/or certified centers.

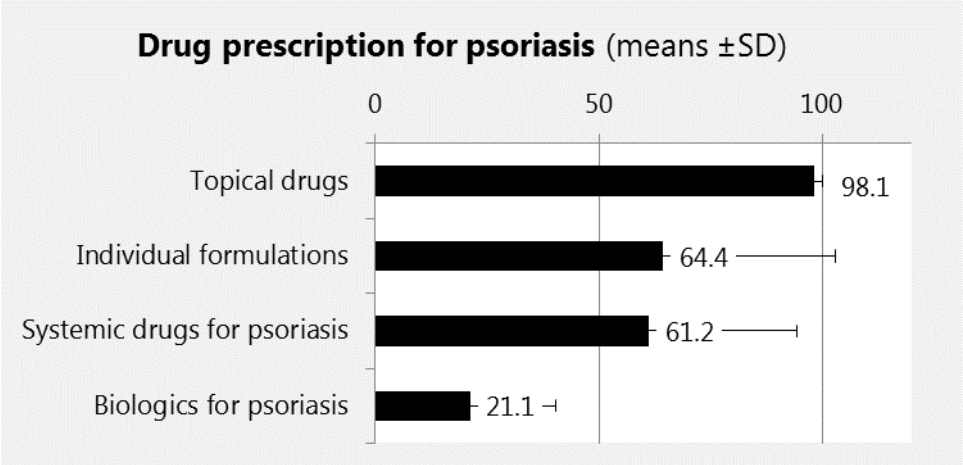


Figure 9: Drug prescription for psoriasis (means ±SD)

4.8 Public skin cancer prevention programs

In many European countries, skin cancer awareness programs and public screening campaigns take place. However, a continuous national program which is offered to all citizens and included into the national health insurance scheme is uncommon. In most countries, only self-selected patients have the opportunity to be screened at the annual Euromelanoma screening day. Only in Germany regular screening is reimbursed available for all insured ≥35 years every year.

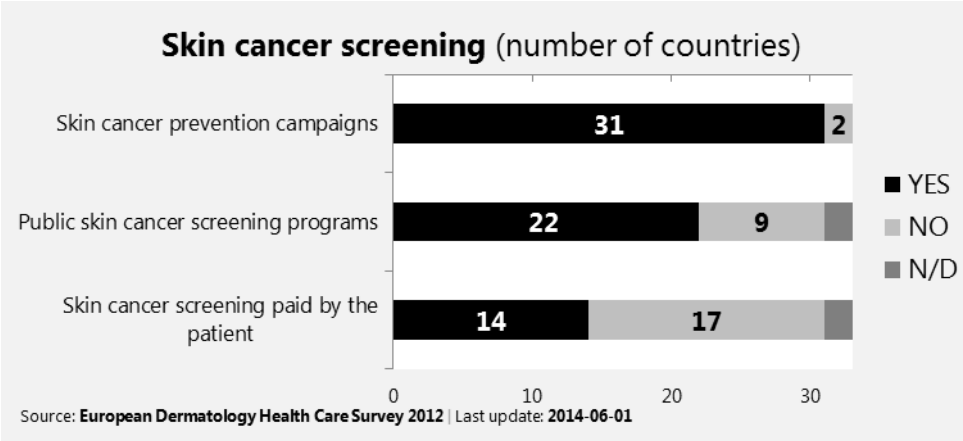


Figure 10: Skin cancer screening (number of countries)

4.9 Fields of work and treatment of skin diseases

The working fields and the competences of dermatologists differed widely between the European countries. Treatment of eczema, acne, contact eczema and sexually transmitted diseases as well as psoriasis, chronic wounds and skin cancer diagnostics is part of dermatology in all countries investigated. Other areas showed a consistent low proportion work share of dermatologists, e. g. proctology and andrology as well as chemo- and immunotherapy for melanoma.

The most striking variations were found in skin cancer surgery (malignant melanoma as well as NMSC), in the treatment of psoriasis arthritis, phlebology and in diagnostics of allergies.

Table 3: Treatment of skin diseases I

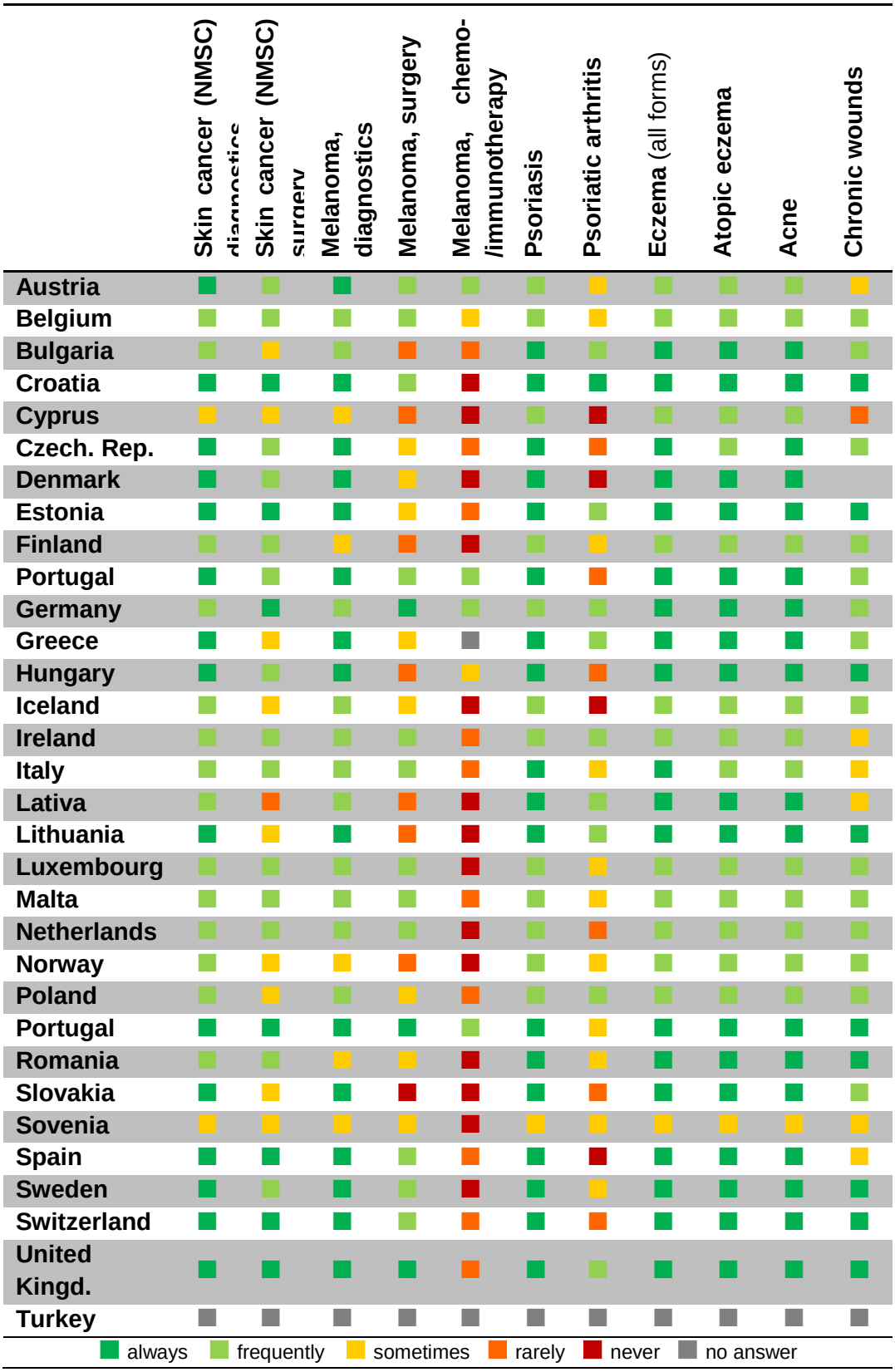
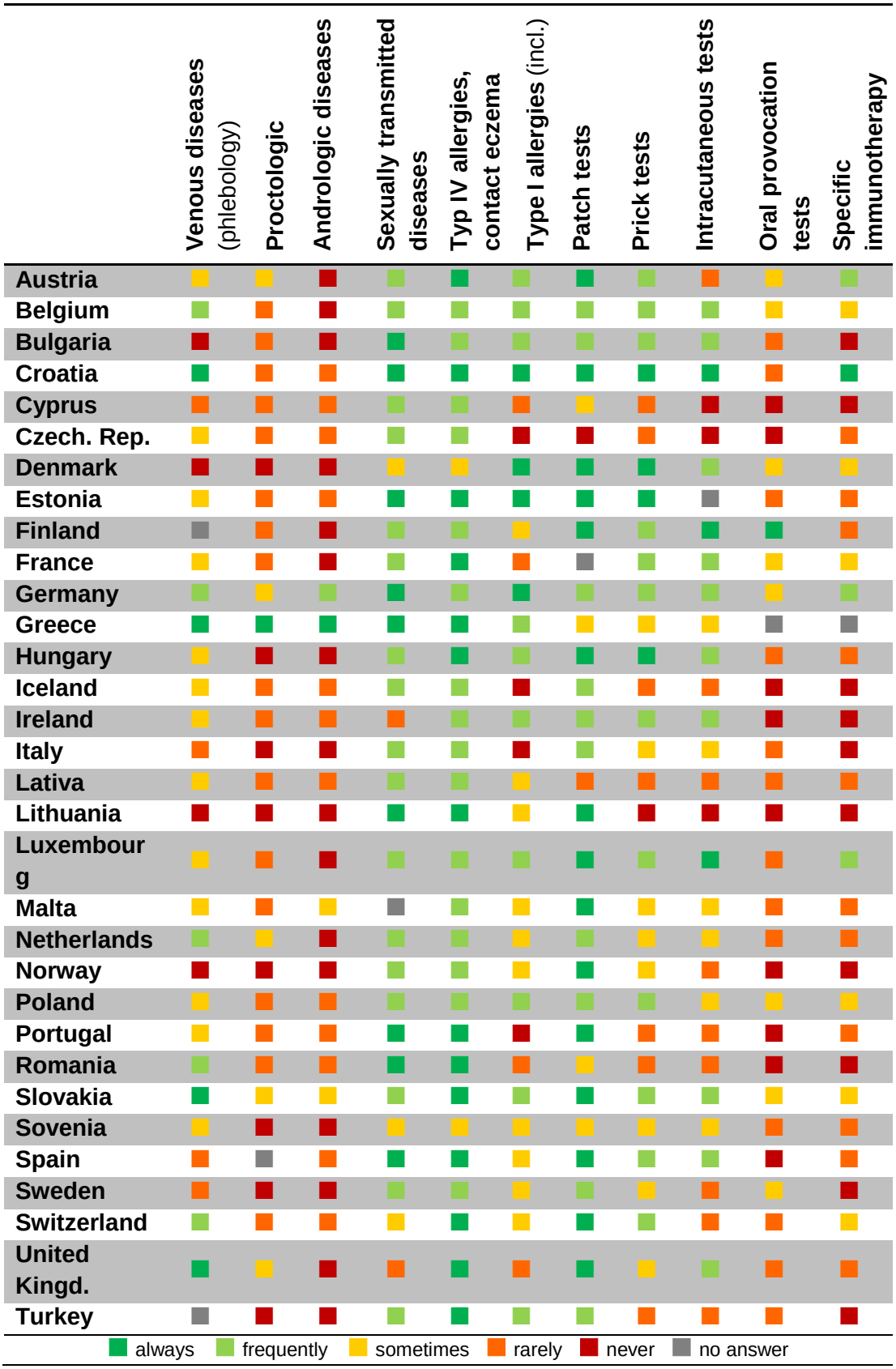


Table 4: Treatment of skin diseases II



4.10 Epidemiology of malignant melanoma

Since the incidence of malignant melanoma shows a high variance across the European countries with high rates up to 25 per 100,000 people in Northern and some central European but much lower rates in Southern and Eastern European countries, we speculated that also differences in the average tumor depth (Breslow level) and the 5-year survival rates are present. The answers for the mean Breslow level ranged from 0.5 mm in Luxembourg to 4.0 mm in Croatia. The 5-year survival rates proposed by the participants showed a very strong negative correlation with the indicated average Breslow level. ($R = -0.856$, $P < 0.001$). However, the indicated incidences and 5-year survival rates differed from official statistics.

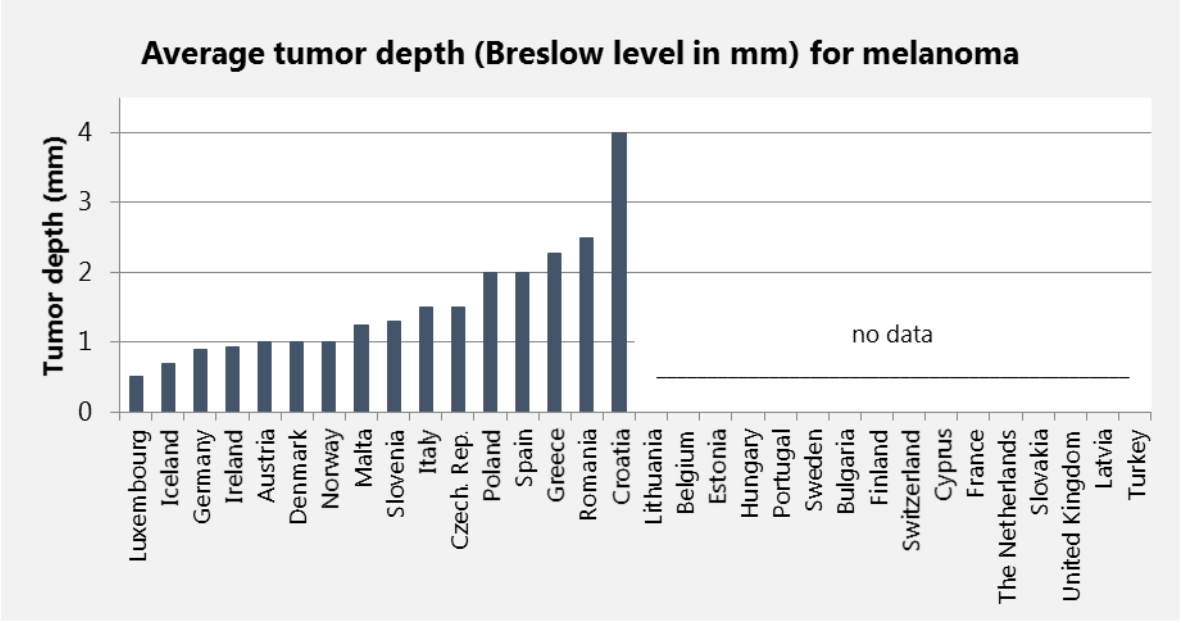


Figure 11: Average tumor depth (Breslow level in mm) for melanoma

4.11 Epidemiology of psoriasis

The answers for the prevalence of psoriasis ranged from one case per 100 inhabitants in Malta to five per 100 in the United Kingdom. The weighted mean was 2.73 per 100 representing a population of about 570 million inhabitants in Europe. The estimate of the percentage of patients suffering from psoriasis arthritis showed a high variation and ranged from 3 % in Denmark to 70 % in Greece. The mean weighted by the number of inhabitants reached 24.2 % and represented a population 420 million Europeans.

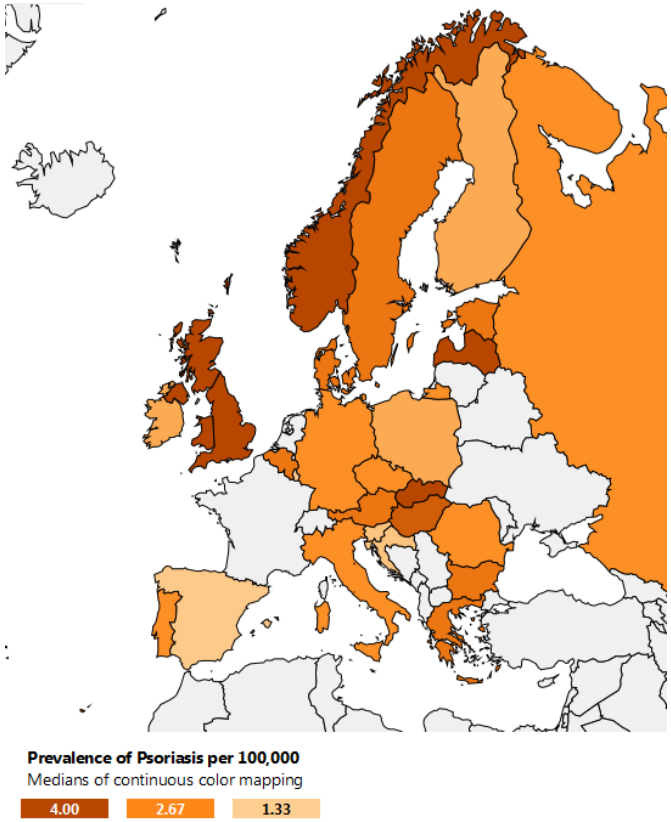


Figure 12: Prevalence of Psoriasis per 100,000

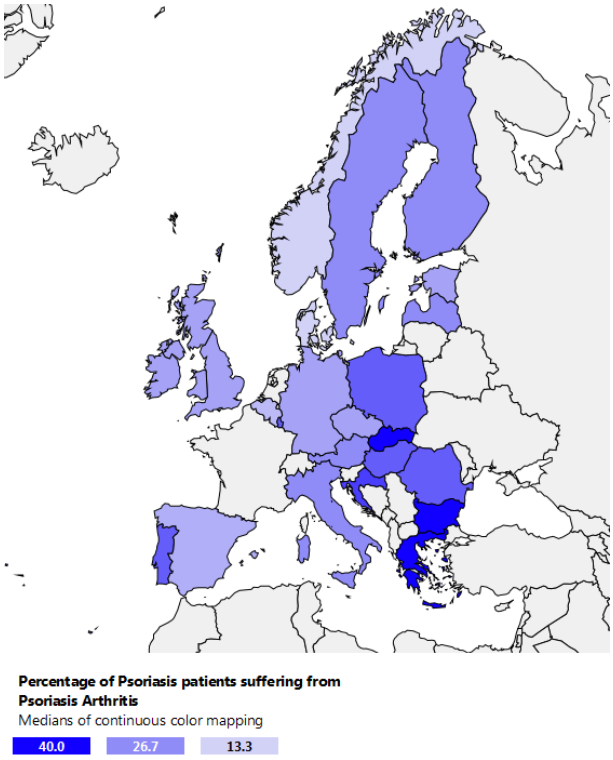


Figure 13: Percentage of Psoriasis patients suffering from Psoriasis Arthritis

4.12 Prescription of biologics

Prescription of biologics is restricted in most countries. In n=14 countries prescription is restricted to hospitals and certified centers and in n=17 countries prescriptions of biologics can also be prescribed by dermatologists in private practice. Drugs differed among the countries, but seem to be predominantly determined by structural organization of health care. In n=13 countries prescription of biologics are possible solely based on clinician's judgment while in other countries additional criteria have to be met.

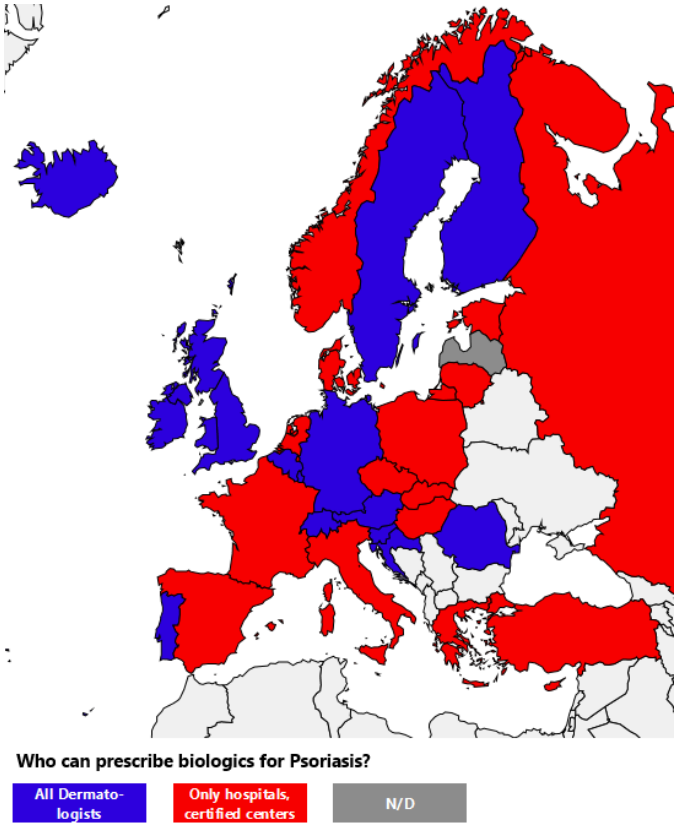


Figure 14: Who can prescribe biologics for Psoriasis?

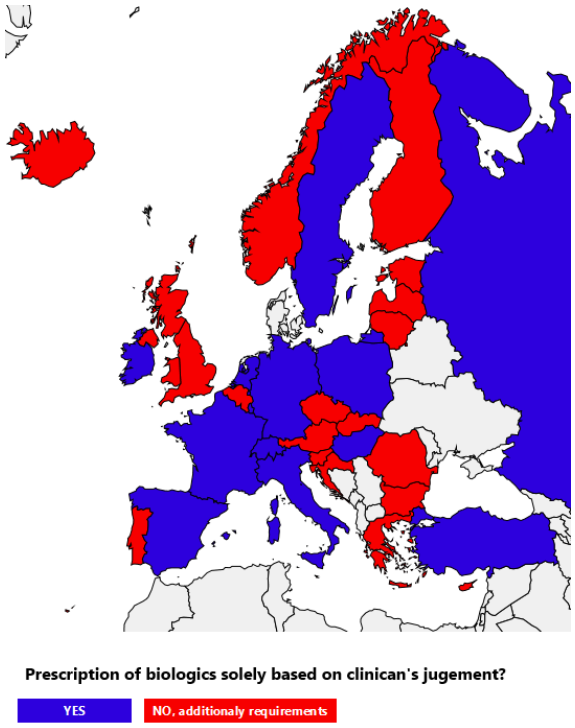


Figure 15: Prescription of biologics solely based on clinician's judgment?

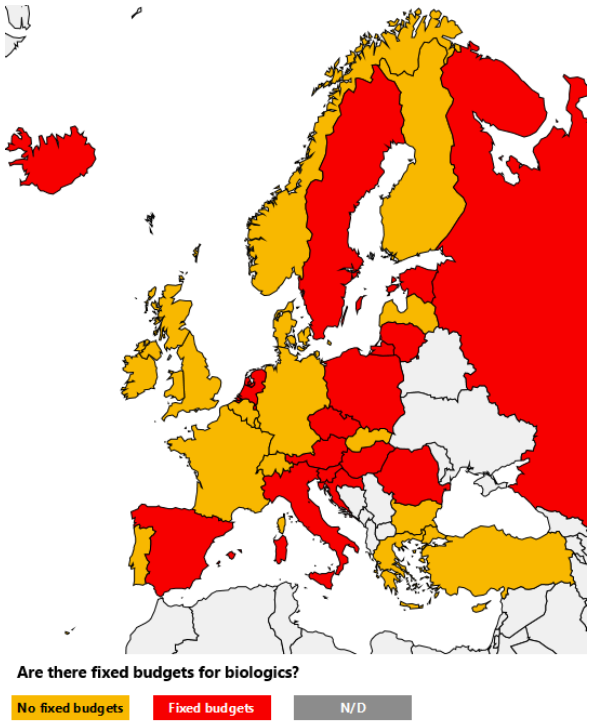


Figure 16: Are there fixed budgets for biologics?

4.13 National guidelines for treatment of psoriasis

A national guideline for psoriasis is available in 19 of 33 countries (57.6 %). The guidelines are frequently supported by the national dermatological societies and required by authorities. In most countries with a general guideline also a guideline for plaque type psoriasis and juvenile psoriasis is available. A screening for co-morbidities and other types of psoriasis is less frequent part of the guideline. Only in a minority of guidelines, pharmacoeconomic data are considered. A patient version is only available in five countries. Influences on prescription behavior were not visible. However, the percentage of psoriasis patients referred to a dermatologist was higher in countries with a national guideline.

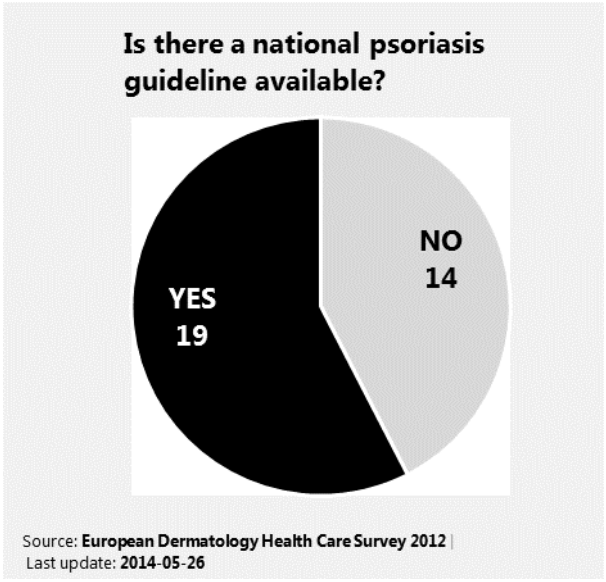


Figure 17: Is there a national psoriasis guideline available?

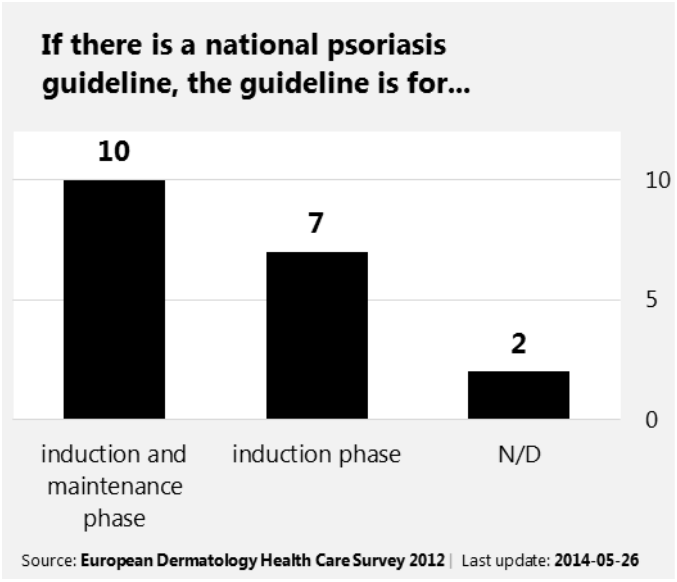


Figure 18: If there is a national psoriasis guideline, the guideline is for...

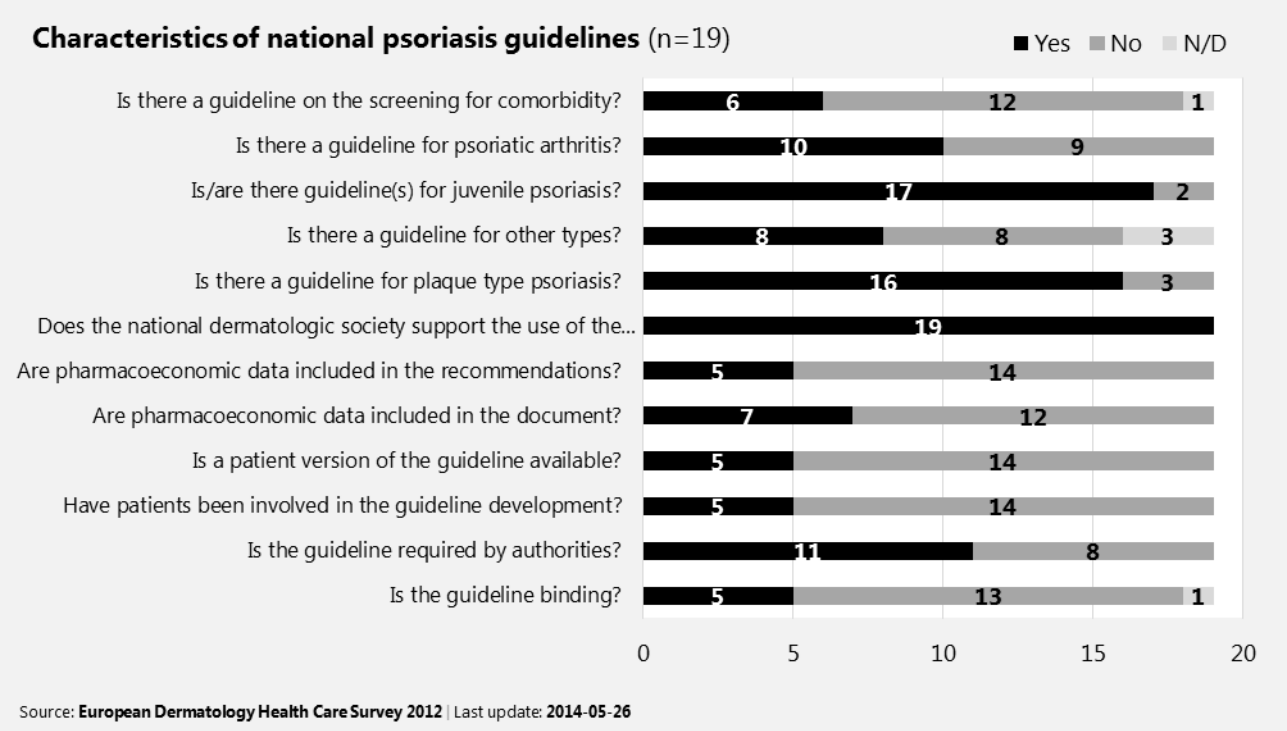


Figure 19: Characteristics of national psoriasis guidelines (n=19)

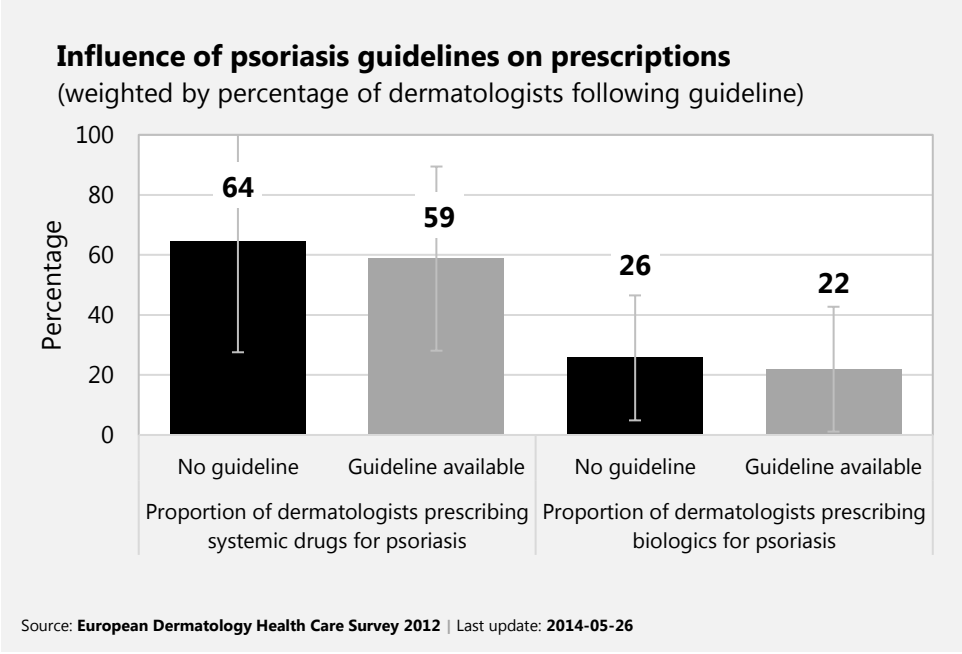


Figure 20: Influence of psoriasis guidelines on prescriptions (weighted by percentage of dermatologists following guideline)

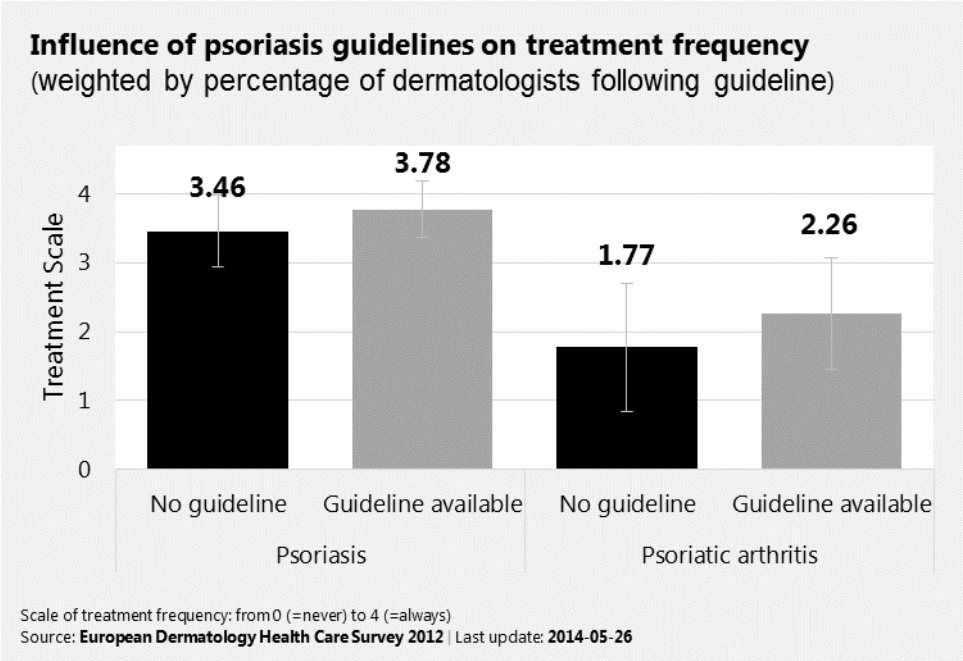


Figure 21: Influence of psoriasis guidelines on treatment frequency (weighted by percentage of dermatologists following guideline)

4.14 Clinical assessment of psoriasis severity

In 28 of 33 countries (84.8%), severity of psoriasis is assessed by a defined clinical scoring. The “Rule of Tens” is frequently used in 16 countries (48.5 %). In 19 of 33 countries (57.6 %) the assessment follows the European consensus paper. A consented definition of severity is absent in five countries (12.2%).

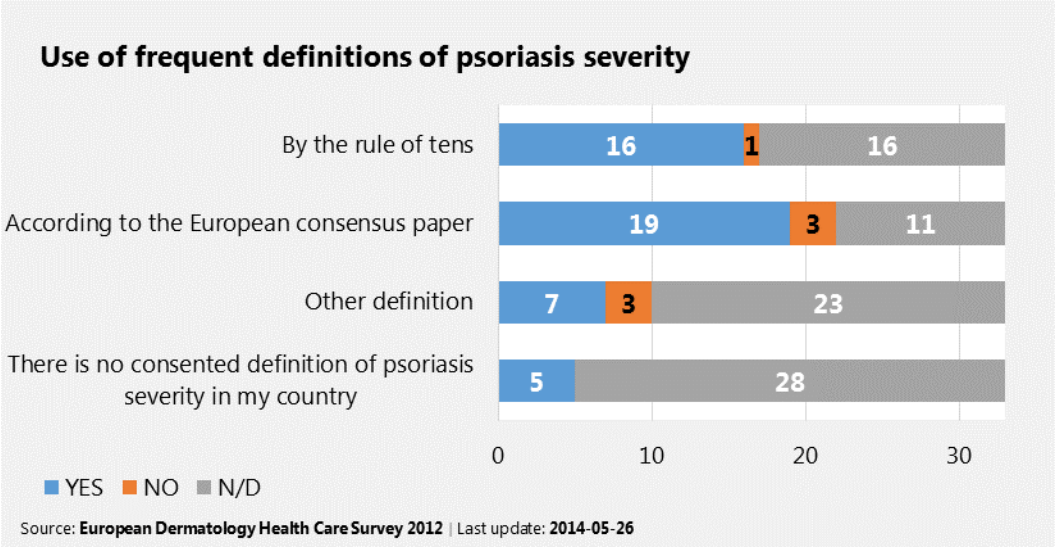


Figure 22: Use of frequent definitions of psoriasis severity

5 Discussion and Conclusions

The current analysis of dermatology health care in Europe is based on direct expert survey controlled by research of public databases and literature. Despite of several steps of quality assurance, the validity of our data is limited by the study design of an expert study. The survey data show that in most of the European countries, a national health system with automatic coverage exists or a statutory health insurance offers health care to nearly all inhabitants. Despite of However, the data have to be interpreted in light of national economic as well as structural differences in the health care systems. However, this does not predict better health care quality and outcomes. Our survey shows that European countries with obligate GP referral in to a dermatologist, showed lower numbers of dermatologists. The organizational structure of health care provision also finds its expression in the distribution of dermatologists in hospitals and private practices. According to differences in dermatology health care staff, the structure of health care institutions differs. We could show that comparing the countries, the spectrum of dermatologists prescribing drugs is variable. The results of the survey could show that the average waiting times for regular visits and allergy test are negatively correlated with the number of inhabitants. Some clues regarding the impact of dermatologic care on treatment quality and outcome can been assumed for psoriasis health care and malignant melanoma: For malignant melanoma, we got hints that diagnostics and surgery performed by dermatologists predict better outcomes. According to the survey participants, prescription rates for systemic drugs, biologics and individual formulations highly differ. Regarding psoriasis, our data show that in countries with national guidelines for diagnostics and treatment, the percentage of patients referred to a dermatologist is enhanced and that standardized clinical assessment tools for severity are more often used largely covered health care.