

5 & 6 October 2022

Athenaeum InterContinental Hotel



# HEALTH WORLD

21st Annual Conference

**STRENGTHENING HEALTH FINANCING: IS IT A  
PREREQUISITE FOR AGILE RESPONSES TO FUTURE CRISES?**

Olympios Papadimitriou, SFEE President

October 5, 2022

Growing and ageing population, a tidal wave of chronic diseases, exponential advances in life-extending therapies and technological advancements are driving the growth in healthcare expenditure globally.

### Growth Trends

Global healthcare spending is on the rise, shining a light on health systems' need to increase efficiency. Before the outbreak of the COVID-19 crisis, the compound annual growth rate for health care spending across 60 countries was predicted to increase 5.4 percent for the period 2018–2022, compared to the actual just 2.9 percent over 2013–2017. The overall share of Gross Domestic Product devoted to health was forecasted at 10.5 percent for 2019 (1). Given the increased needs of the global population due to COVID, this trend is expected to be further reinforced.

## Global Drivers



### Ageing Populations



### Disease Trends



### Innovation



### Ageing Populations

Average life expectancy, on a global level, has increased from **66,5 years** in 2000 to **72 years** in 2016 (2), – interestingly, latest estimates indicate that gains in longevity have slowed recently in various countries, a trend which, if confirmed, increases the urgency of putting in place a sustainable healthcare system.

### Rise of Chronicity



Between **2018** and **2040** the incidence of **cancer** in Europe is predicted to increase by **23%**<sup>(3)</sup>



Between **2017** and **2045** the number of adults with **diabetes** in Europe is projected to increase by **16%**<sup>(4)</sup>

### Innovation



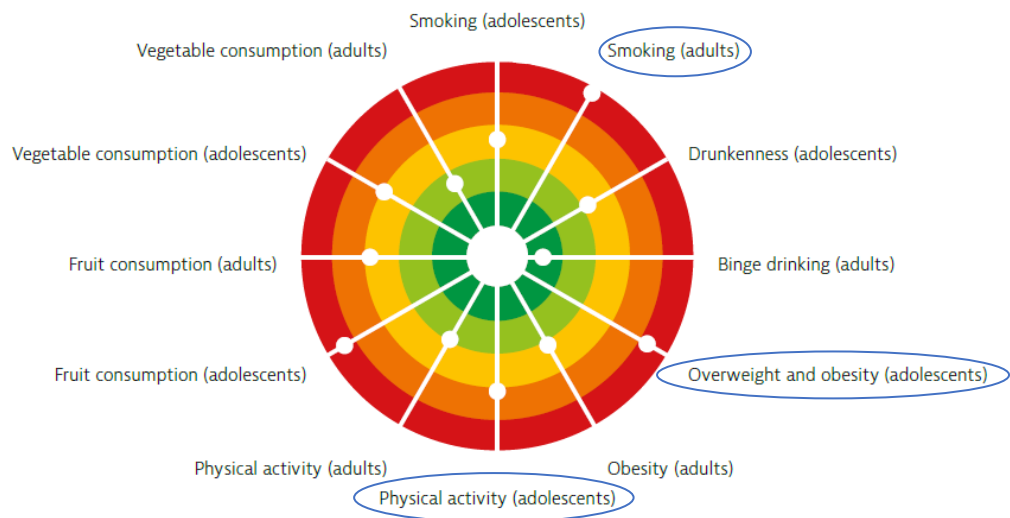
Between **2007** & **2017**:

- the EMA has given **1,544** orphan drug designations
- the FDA has given **2,711** orphan drug designations<sup>(5)</sup>

Worldwide is estimated that orphan drug sales will total **\$217 billion** by 2023 up from **\$118 billion** in 2017<sup>(5)</sup>.

Manufacturers are looking to move to a range of value added products under the moniker "**beyond the pill**". These innovative products may support the elimination of diseases (i.e. Global Strategy to eliminate hepatitis by 2030).

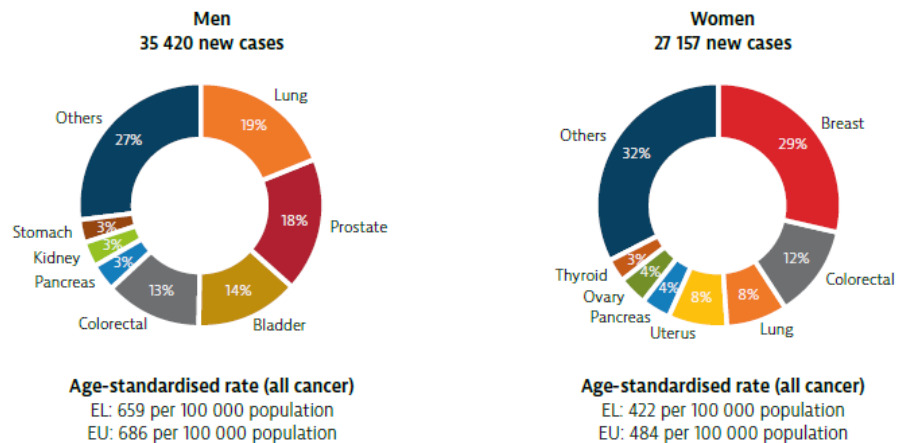
Figure 5. Tackling smoking among adults and obesity in adolescents are important public health issues



Note: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white "target area" as there is room for progress in all countries in all areas.

Sources: OECD calculations based on HBSC survey 2017-18 for adolescents indicators; EHIS 2014 and 2019 for adults indicators.

Figure 3. An estimated 62 000 people in Greece were expected to be diagnosed with cancer in 2020



Note: Non-melanoma skin cancer is excluded. Uterus cancer does not include cancer of the cervix.  
Source: ECIS – European Cancer Information System.

1. It should be noted that these estimates were made before the COVID-19 pandemic; this may have an effect on both the incidence and mortality rates of cancer during 2020.

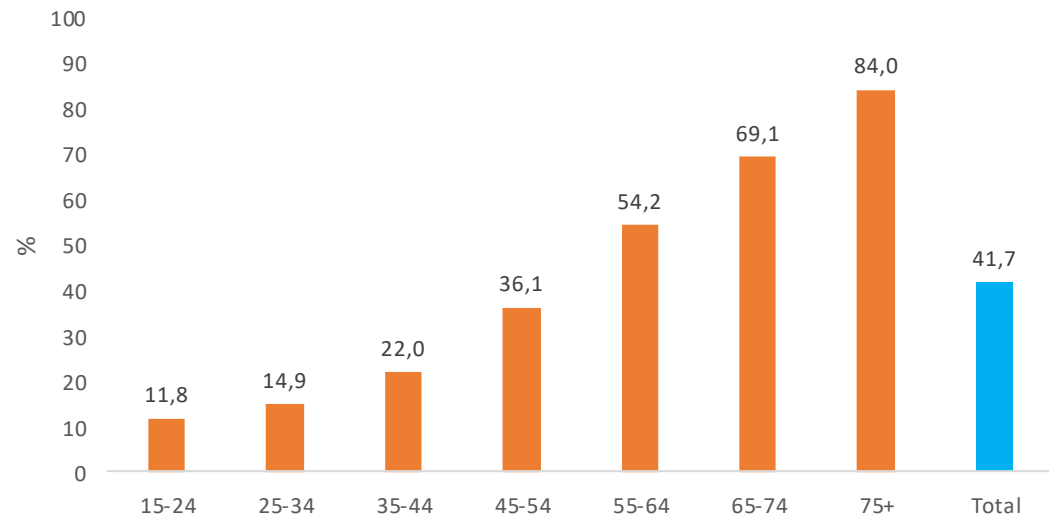
Table 2 Number of people with recorded data and estimated after weighting mean (95% CI) and prevalence (95% CI) of cardiovascular (CVD) risk factors overall and by sex

	Men		Women		Total	P-value*
	N	Estimates	N	Estimates		
SBP* (mm Hg) (Mean; 95% CI)	2031	131.3 (130.5, 132.2)	2722	125.2 (124.2, 126.1)	128.1 (127.5, 128.8)	< 0.001
DBP* (mm Hg) (Mean; 95% CI)	2031	80.3 (79.7, 80.9)	2722	74.9 (74.4, 75.4)	77.5 (77.1, 77.9)	< 0.001
Hypertension Prevalence (%) (Estimate; 95% CI)	2006	42.4 (39.8, 45.1)	2693	36.1 (34.0, 38.3)	39.2 (37.4, 40.9)	< 0.001
Hypertension Prevalence (%) among 18–69 yrs (Estimate; 95% CI)	1573	34.8 (32.1, 37.6)	2155	25.5 (23.0, 27.0)	29.9 (28.2, 31.6)	< 0.001
HDL cholesterol (Mean; 95% CI)	1896	44.3 (43.4, 45.0)	2525	53.3 (52.5, 54.0)	48.9 (48.2, 49.5)	< 0.001
Total serum cholesterol (mg/dL) (Mean; 95% CI)	1896	192.9 (190.1, 195.6)	2525	194.2 (191.9, 196.4)	193.5 (191.6, 195.5)	0.410
Prevalence TC ≥190 mg/dL or medication (estimate; 95% CI)	1851	59.5 (56.5, 62.4)	2477	60.9 (58.4, 63.3)	60.2 (58.2, 62.2)	0.449
Prevalence of TC ≥240 mg/dL or medication (estimate; 95% CI)	1851	27.3 (24.9, 29.7)	2477	28.3 (26.4, 30.3)	27.8 (26.2, 29.4)	0.472
Fasting glucose (mg/dL) (Mean; 95% CI)	1065	94.8 (92.8, 96.8)	1319	91.2 (90.0, 92.5)	93.1 (91.9, 94.3)	0.002
HbA1c (%) (Mean; 95% CI)	1873	5.4 (5.4, 5.5)	2470	5.4 (5.4, 5.4)	5.4 (5.4, 5.4)	0.115
Prevalence of diabetes mellitus (%) (Estimate; 95% CI)	1888	12.4 (11.0, 14.0)	2505	10.9 (9.6, 12.3)	11.6 (10.7, 12.7)	0.131
BMI (kg/m <sup>2</sup> ) (Mean; 95% CI)	2039	28.3 (28.0, 28.5)	2726	28.1 (27.8, 28.4)	28.2 (28.0, 28.4)	0.395
Overweight (%) (Estimate; 95% CI)	2039	45.0 (42.5, 47.5)	2726	30.6 (28.7, 32.6)	37.6 (35.9, 39.2)	< 0.001
Obesity (%) (Estimate; 95% CI)	2039	30.5 (28.3, 32.9)	2726	33.6 (31.6, 35.7)	32.1 (30.5, 33.8)	0.036
Current smokers (%) (Estimate; 95% CI)	2065	44.0 (41.6, 46.4)	2757	32.7 (30.5, 35.0)	38.2 (36.5, 39.9)	< 0.001

\*Comparison between men and women

Touloumi et al. BMC Public Health (2020) 20:1665. High prevalence of cardiovascular risk factors in adults living in Greece: the EMENO National Health Examination Survey

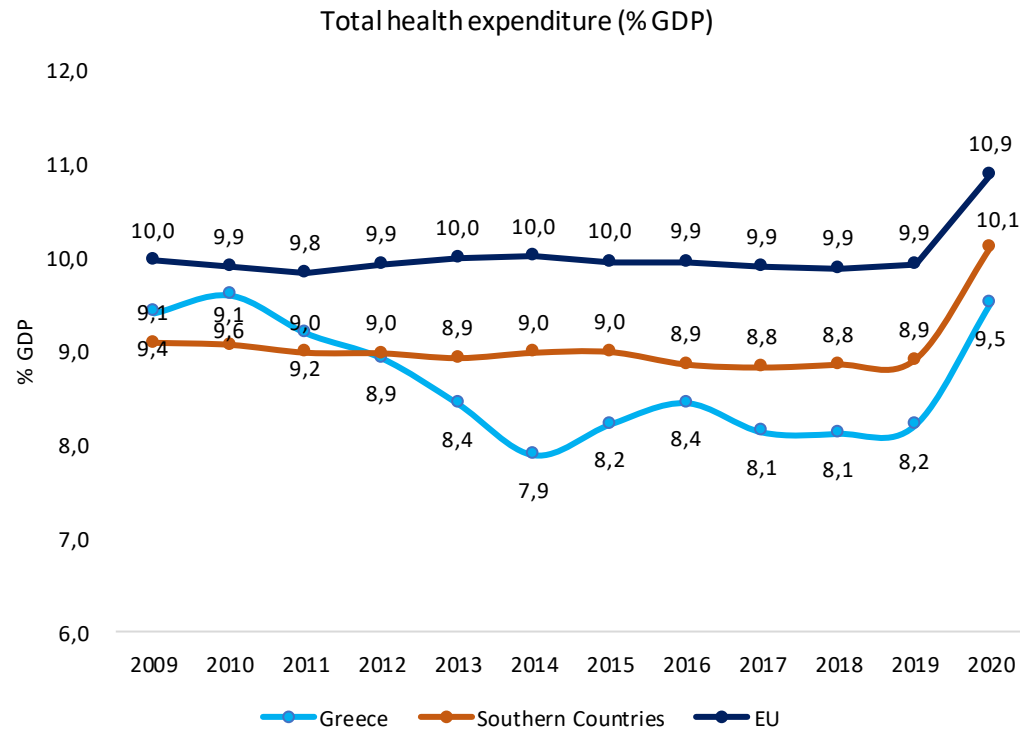
Percentage of population suffering from chronic health problem or chronic disease, 2019



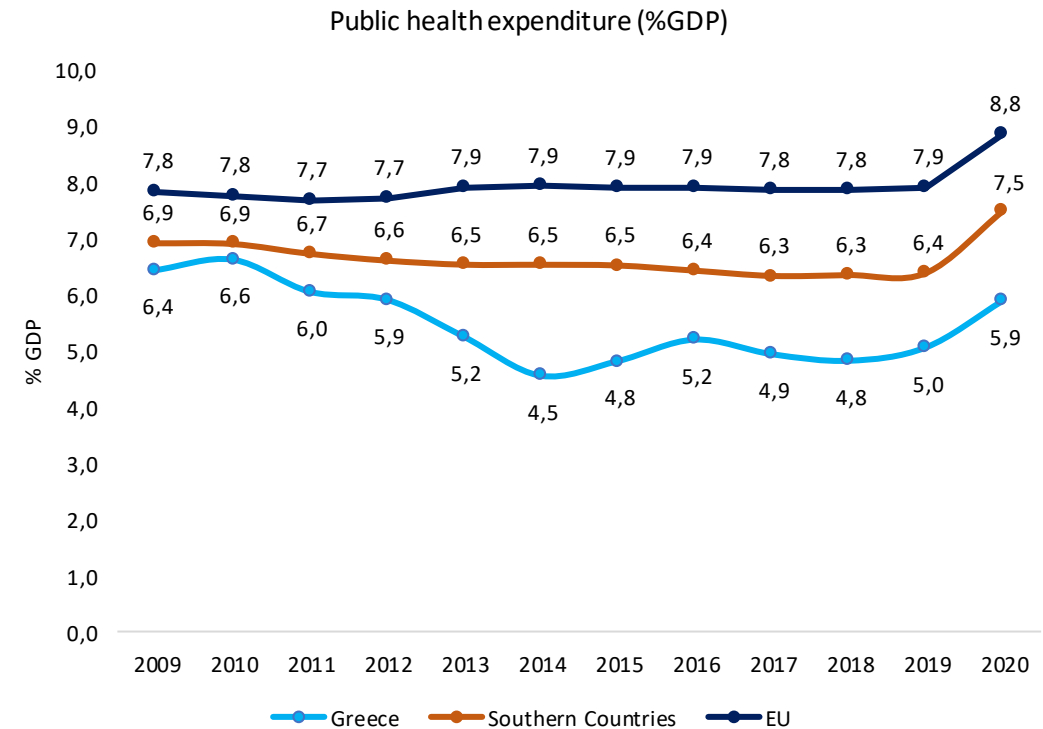
Source: ELSTAT, 2020, Chronic illness or health problem mean illnesses or health problems which have lasted, or are expected to last, for 6 months or more, with or without medication

# Underfunding of healthcare system continues

Total health expenditure (% GDP) Greece-EU-Southern countries



Public health expenditure (% GDP) Greece-EU-Southern countries



Source: System of Health Accounts (SHA) 2020, ELSTAT., 2022, OECD Health Statistics, 2022, data processing IOBE. Southern countries (Italy, Spain, Portugal).

# 2021 witnessed the EMA marketing authorization of 92 medicines, 54 of which were new active substances



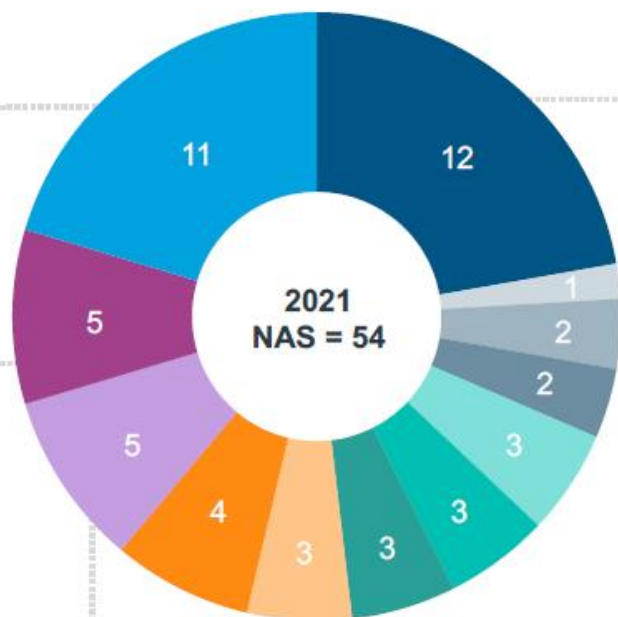
- **Conditional approval, exceptional circumstances, and/or accelerated approval, n = 20**
- **Orphan designated products, n = 9**

## Infectious Disease\*

- COVID-19 vaccine Janssen (COVID-19)
- nuvaxovid (COVID-19)
- regdanvimab (COVID-19)
- casirivimab / imdevimab (COVID-19)
- elasomeran (COVID-19)
- Vaxzevria (COVID-19)
- sotrovimab (COVID-19)
- Apexxnar (Pneumonia)
- Vaxneuvance (Pneumonia)
- artesunate (Malaria)
- tecovirimat monohydrate (Orthopox viruses)

## Neurology

- ● remimazolam (Sedation)
- ● risdiplam (Spinal Muscular Atrophy)
- ● selumetinib (Neurofibromatosis Type I)
- ● elivaldogene autotemcel (CALD)
- ● eptinezuman (Migraines)



## Oncology

- ● idecabtagene vicleucel (Multiple Myeloma)
- pralsetinib (RET+ NSCLC)
- dostarlimab (dMMR EC)
- sotorasib (KRAS+ NSCLC)
- selinexor (Multiple Myeloma)
- enfortumab vedotin (Bladder Cancer)
- ● pemigatinib (Cholangiocarcinoma)
- ripretinib (GIST)
- amivantamab (EGFR+ NSCLC)
- tepotinib (METex14+ NSCLC)
- sacituzumab govitecan-hziy (TNBC)
- ● glucarpidase (Methotrexate toxicity)

## Hematology

- ● zanubrutinib (WM)
- ● dubelisisib (CLL/SLL & FL)
- ● roxadustat (Anaemia/CKD)
- ● tafasitamab (r/r DLBCL)
- ● voxelotor (Anaemia/SCD)

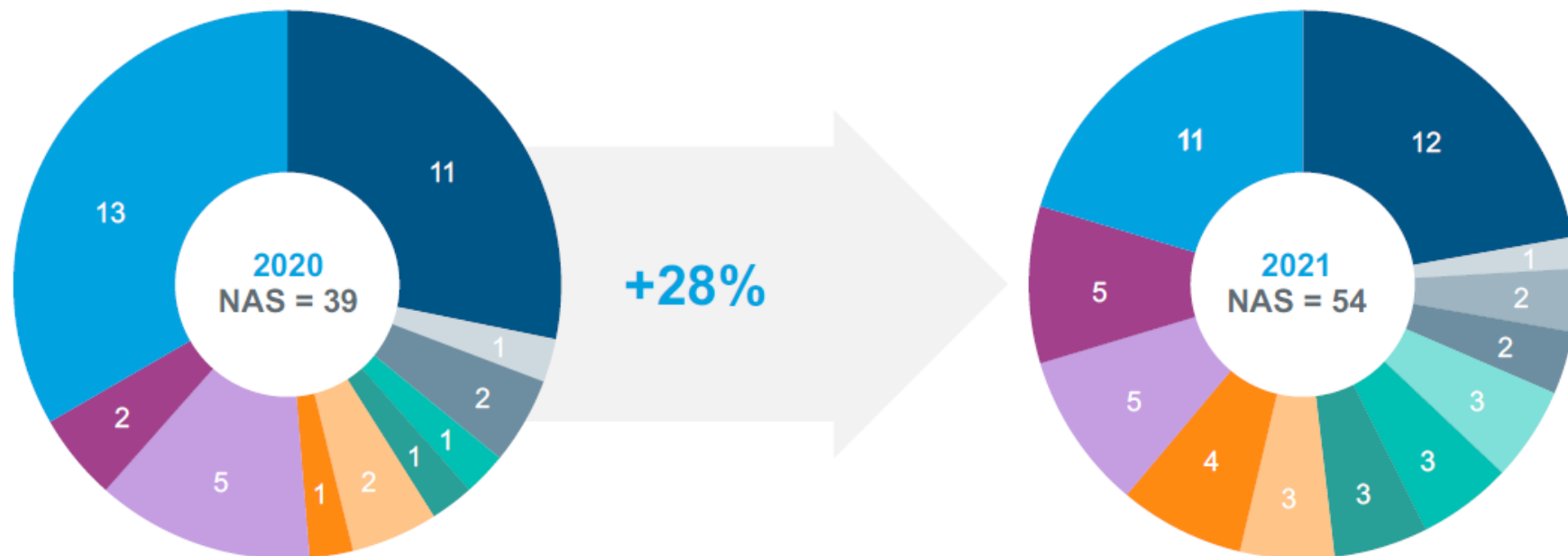
Note: \* Infectious diseases includes COVID-19, vaccines; and infection therapeutics; Abbreviations: Coronavirus Disease (COVID-19); Spinal Muscular Atrophy (SMA), Cerebral Adrenoleukodystrophy (CALD); Non-Small Cell Lung Cancer (NSCLC); Gastrointestinal Stromal Tumor (GIST); Tumour-Negative Breast Cancer (TNBC); Waldenström's Macroglobulinemia (WM); Chronic/ Slow-Growing Lymphocytic Leukemia (CLL/SLL); Follicular Lymphoma (FL); Chronic Kidney Disease (CKD); Diffuse Large B-Cell Lymphoma (DLBCL); Sickle Cell Disease (SCD)

# The number of new active substances approved by EMA in 2021 increased by ~30% compared to 2020



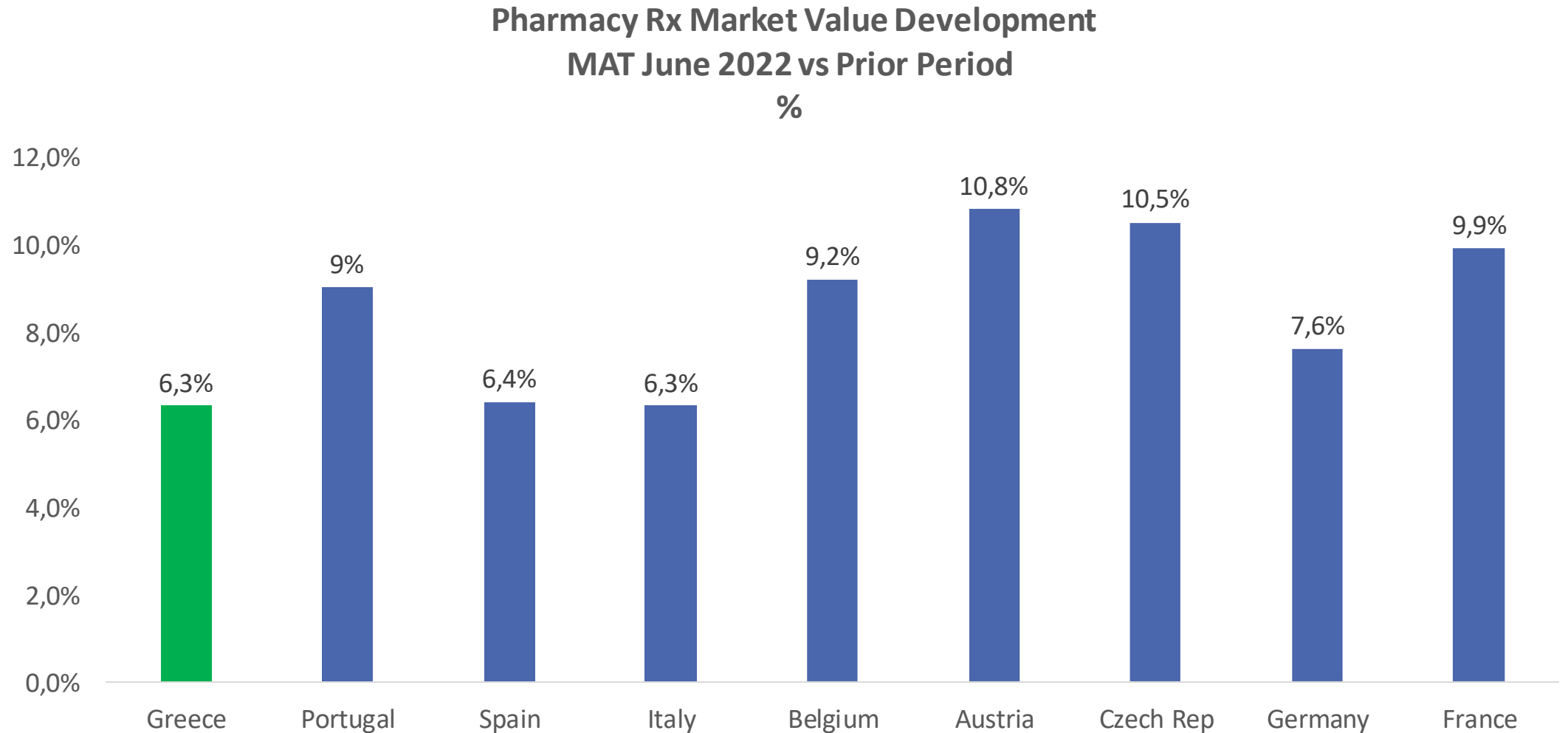
## Across TAs:

- **6** PRIME designations (vs. 8 in 2020)
- **9** orphan designations (vs 7 in 2020)
- **20** conditional approvals / exceptional circumstances, and/or accelerated approvals (vs 24 in 2020)

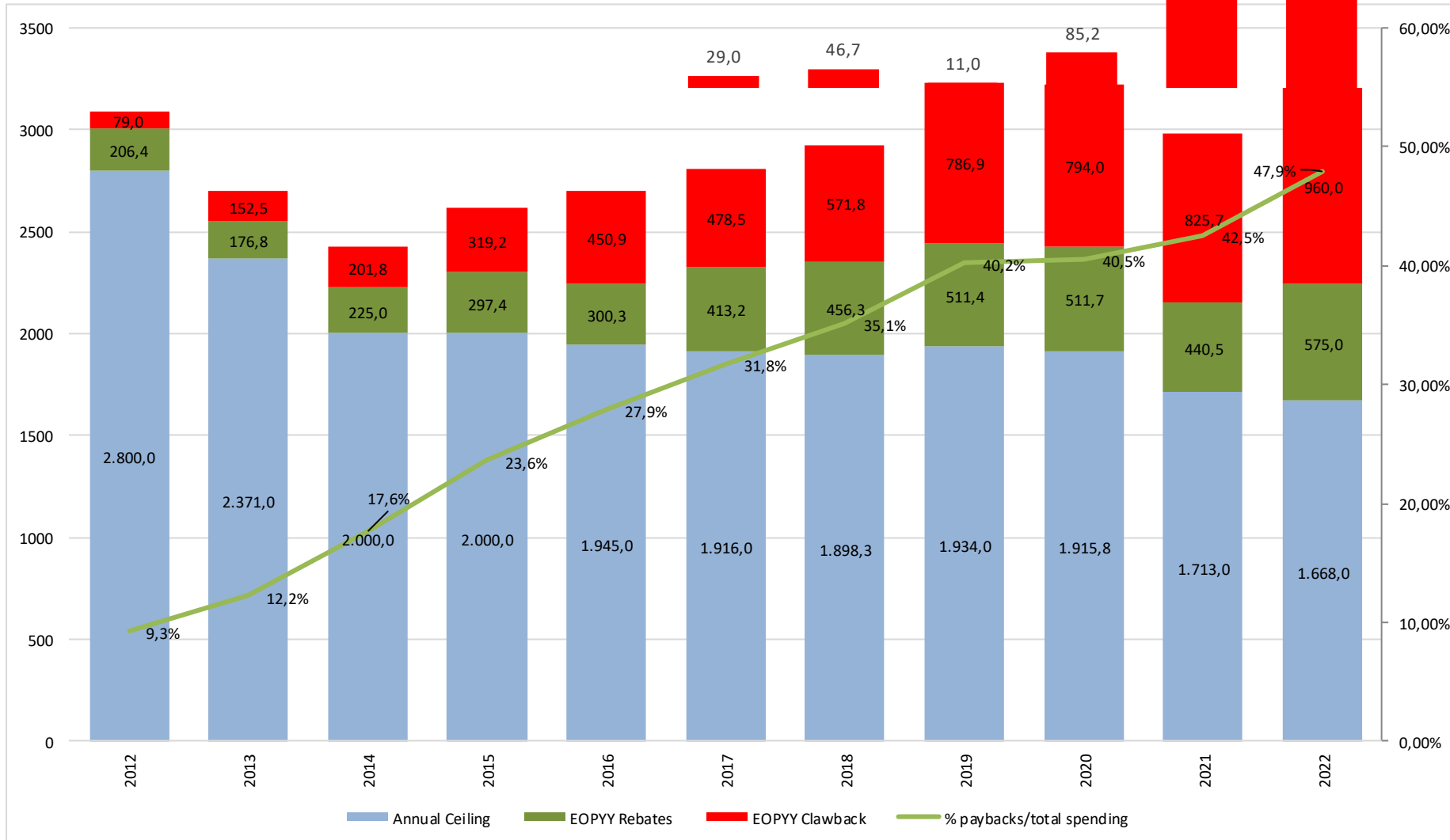


Between 2020 and 2021, **infectious disease and cancer continued to represent the majority of NAS approvals by EMA**, providing continued developmental support, expedited reviews, and early access to new medicines with outstanding contributions to public health

# The Reimbursed pharma market is growing rapidly during the post COVID era



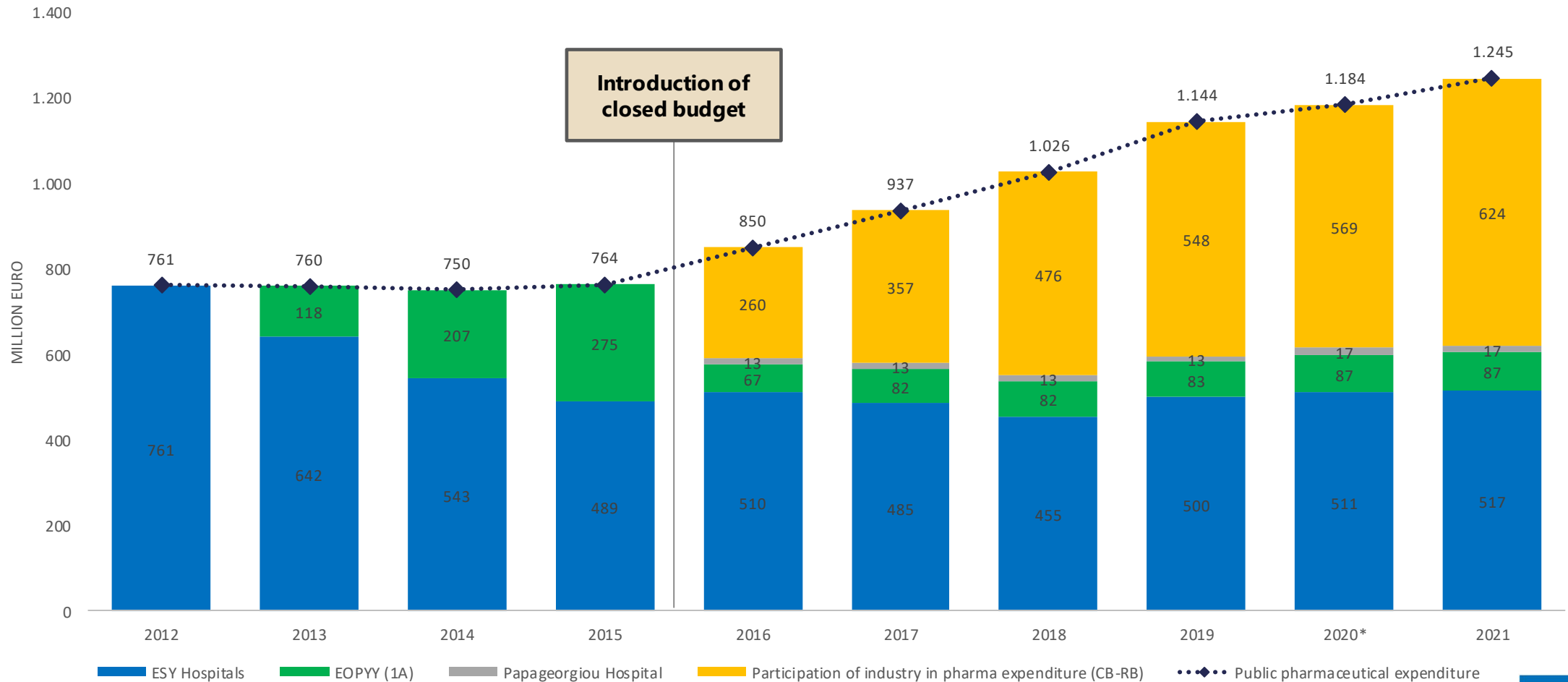
# Evolution of EOPYY pharma expenditure – The tricks of reducing the clawback





# Hospital Market

The reduction in public hospital pharmaceutical expenditure and the imposition of the clawback resulted in the significant increase of total expenditure and mandatory returns



Source: EOPYY 2012-2021, ESY.net 2012-2015, data processing IOBE-SFEE. Note: Estimations for 2021 for industry's contribution. EOPYY (1A) includes Aretaio hospital

# Greece is among the countries that invest less in their healthcare system

Health spending per capita in Greece is around half the average in the EU

