



*TPG International Health Academy*

*Italy Educational Summit*

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# THE ITALIAN HEALTHCARE SYSTEM AND PHARMA: AN INTRODUCTION

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*Usual disclaimers apply*

# PRESENTATION ROADMAP

Italy, health, and pharma: scene-setting

The Italian NHS and pharma expenditures

Regulators and gatekeepers: the Italian Medicines Agency

*Intermezzo:* Shock therapy. Covid-19 and (EU) access to medicines

Italy and pharma: an industrial view

Conclusions

# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

The country: a few basic infos (source: <https://www.cia.gov/the-world-factbook/countries/italy/>)



## ■ Area

- Total: 301,340 sq km (slightly larger than Arizona)
- Land: 294,140 sq km
- Water: 7,200 sq km
- «Note: includes Sardinia and Sicily»

## ■ Population

- 61,095,551 (2022 est.)
- Growth rate: 0.13% (2022)

## ■ Economic overview and main industries

- Overall: core EU economy; strong services, manufacturing, and tourism sectors; hard hit by COVID-19 disruptions but starting to recover
- Main industries: tourism, machinery, iron and steel, chemicals, food processing, textiles, motor vehicles, clothing, footwear, ceramics
- Exports - value: \$558.26 billion (2020)
- Exports - commodities: packaged medicines, cars and vehicle parts, refined petroleum, valves, trunks/cases, wine (2019 est.)
- Exports - partners: Germany 12%, France 11%, USA 10%, UK 5% (2019)

# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

## ■ Italy and health: recent international comparisons

(source: <https://www.oecd.org/italy/health-at-a-glance-Italy-EN.pdf>)

● Italy  
● OECD  
● Highest performer  
● Lowest performer

Health status is good in Italy, which has one of the oldest populations across OECD countries

### Life expectancy (2019 or nearest year)

Years of life at birth



### Avoidable mortality (2019 or nearest year)

Deaths per 100 000 population (age-standardised)



### Population ageing (2019 or nearest year)

Share of population 65 or older



### Self-rated health (2019 or nearest year)

Population in poor health (% population 15+)



Life expectancy fell by 1.2 years during the pandemic, from 83.6 years in 2019 to 82.4 years in 2020 (compared to an average reduction of 0.6 years across OECD countries).



The pandemic caused health spending as a share of GDP to rise sharply, from 8.7% in 2019 to 9.7% in 2020 (compared to an average 0.9 percentage point increase in the OECD area).



71% of the Italian population has been fully vaccinated against COVID-19, compared to 65% across the OECD on average (as of November 1).

# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

Population coverage is high, though satisfaction with quality of care is below the OECD average

**Population coverage, eligibility** (2019 or nearest year)

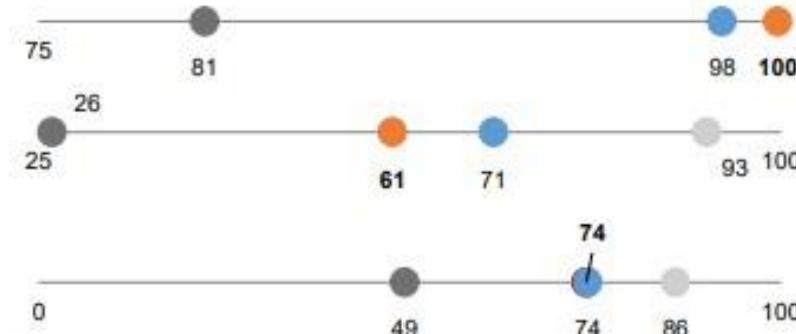
Population eligible for core services (% population)

**Population coverage, satisfaction** (2019 or nearest year)

Population satisfied with availability of quality health care  
(% population)

**Financial protection** (2019 or nearest year)

Expenditure covered by compulsory prepayment  
(% total expenditure)



Many indicators of health resources are at or somewhat below the OECD average

**Health spending** (2019 or nearest year)

Per capita (USD based on PPPs)

**Long-term care spending** (2019 or nearest year)

% GDP

**Doctors** (2019 or nearest year)

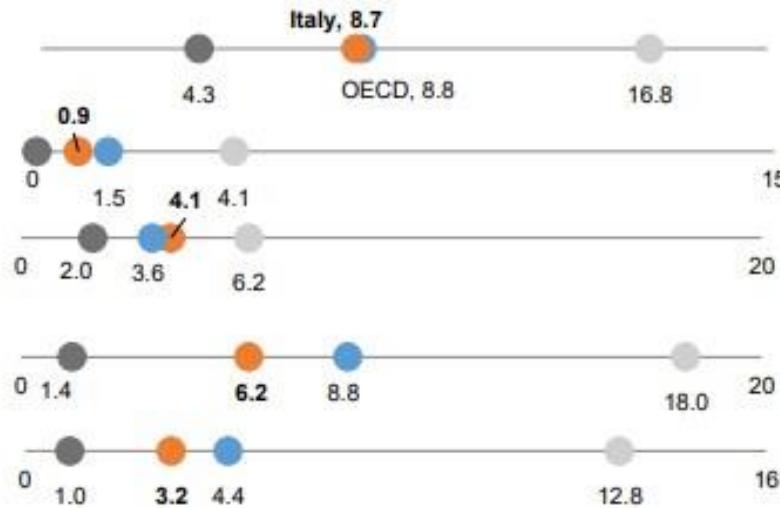
Practicing physicians (per 1 000 population)

**Nurses** (2019 or nearest year)

Practicing nurses (per 1 000 population)

**Hospital beds** (2019 or nearest year)

Per 1 000 population



# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

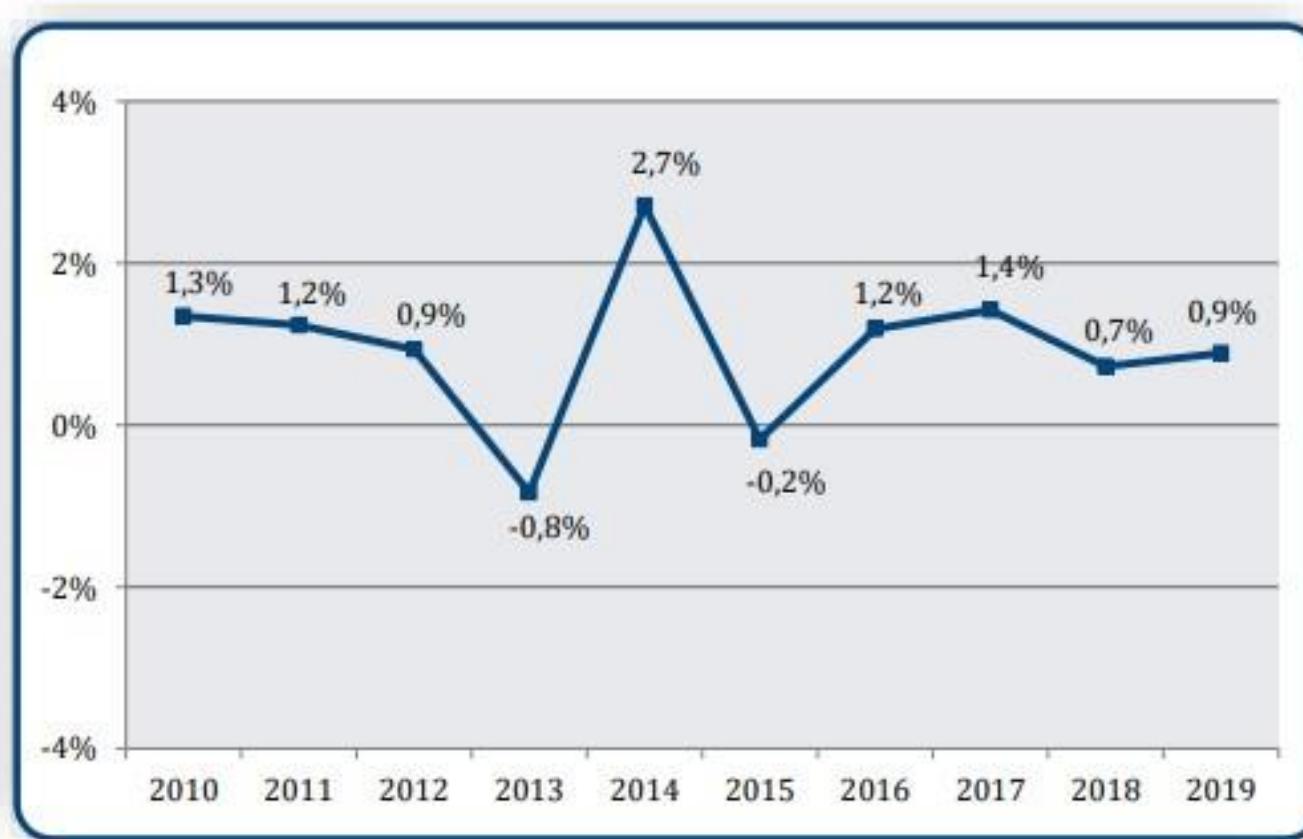
- Italy, healthcare, and pharma: main tenets (source: <https://www.commonwealthfund.org/international-health-policy-center/countries/italy>)
- Since December 1978 Italy has a National Healthcare System (NHS, Servizio Sanitario Nazionale). The NHS automatically covers all Italian citizens and legal foreign residents by providing a full range of healthcare services with a free choice of providers. The service is guided by the principles of universal coverage, solidarity, human dignity, and health. It's a real **universal system**.
- Patients make copayments for specialty visits and procedures and some outpatient drugs. Exempt from cost-sharing are pregnant women, patients with HIV or other chronic diseases, and young children and older adults in lower-income households. There are no deductibles for residents.
- Residents receive mostly free primary care, inpatient care, and health screenings. Other statutory benefits include maternity care, specialty care, home care, hospice care, preventive medicine, and pharmaceuticals.
- The NHS is funded by corporate and value-added tax revenues collected by the central government and distributed to the regional governments, which are responsible for delivering care. **The NHS does not allow people to opt out of the system and seek only private care, therefore substitutive insurance does not exist. All in all, private health insurance (so-called second pillar) plays a limited role in Italy.**

# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

- The NHS is usually praised at an international level, its performance constantly scoring among the highest ranked by the WHO and other international institutions (both in terms of absolute quality and value-for-money). Some warnings have to be made, however.
- First of all, along the last decade the NHS was put under constant **economic pressures** because of linear cuts made by the central government to its budget:
  - 2010-2019: massive out-financing (- € 37 billion);
  - 2020-2022: increase of ca. € 11.2 billion, of which € 5.3 with Covid-19 special decrees. NHS budget will now be € 12.406 billion (2022), € 12.606 billion (2023), and € 12.806 billion (2024).
  - Please note: the 2022 increase has been largely absorbed by the pandemic costs, and is insufficient to keep the regional budgets in order.
- Also, because of the regional drive of NHS healthcare management and providing, the **quantity and quality of services offered to citizens can vary widely depending on the geographical area** considered, with a strong imbalance between northern and southern regions and a strong mobility from the latter to the former to obtain better services (e.g. sophisticated surgical operations, advanced therapies, etc.).

# ITALY, HEALTH, AND PHARMA: SCENE-SETTING

Trend in NHS total budget (2010-2019)



Source: [https://www.gimbe.org/osservatorio/Report\\_Osservatorio\\_GIMBE\\_2019.07\\_Definanziamento\\_SSN.pdf](https://www.gimbe.org/osservatorio/Report_Osservatorio_GIMBE_2019.07_Definanziamento_SSN.pdf)  
See also: [https://temi.camera.it/leg18/temi/tl18\\_il\\_fabbisogno\\_sanitario.html](https://temi.camera.it/leg18/temi/tl18_il_fabbisogno_sanitario.html)

# THE ITALIAN NHS AND PHARMA EXPENDITURES

- Italy and pharma, a consumers' view (source: [https://www.aifa.gov.it/documents/20142/1542390/Rapporto-OsMed-2020\\_EN.pdf](https://www.aifa.gov.it/documents/20142/1542390/Rapporto-OsMed-2020_EN.pdf))
- According to the most recent official data, **in 2020 the overall pharmaceutical expenditure (both public and private) amounted to 30.5. billion euros** and was stable compared to the previous year. It represents an important component of the national health expenditure, accounting for 1.8% of the gross domestic product (GDP).
- **Public expenditure, worth 23.4 billion euros, accounts for 76.5% of total pharmaceutical expenditure and 18.9% of public health expenditure** and has remained almost stable compared to 2019 (-0.8%).
- The citizen pharmaceutical expenditure, including cost-sharing (regional tickets and difference between the price of patent-expired medicine and reference price) for privately purchased class A and class C medicines totaled 8.7 billion euros, with a decrease of 2.0% compared to 2019.
- Per capita pharmaceutical expenditures amounted to 385.88 euros; consumption was 1,163.4 DDD/1000 inhabitants, both data were stable compared to 2019.

# THE ITALIAN NHS AND PHARMA EXPENDITURES

Figure 9.1. Expenditure on retail pharmaceuticals by type of financing, 2019 (or nearest year)

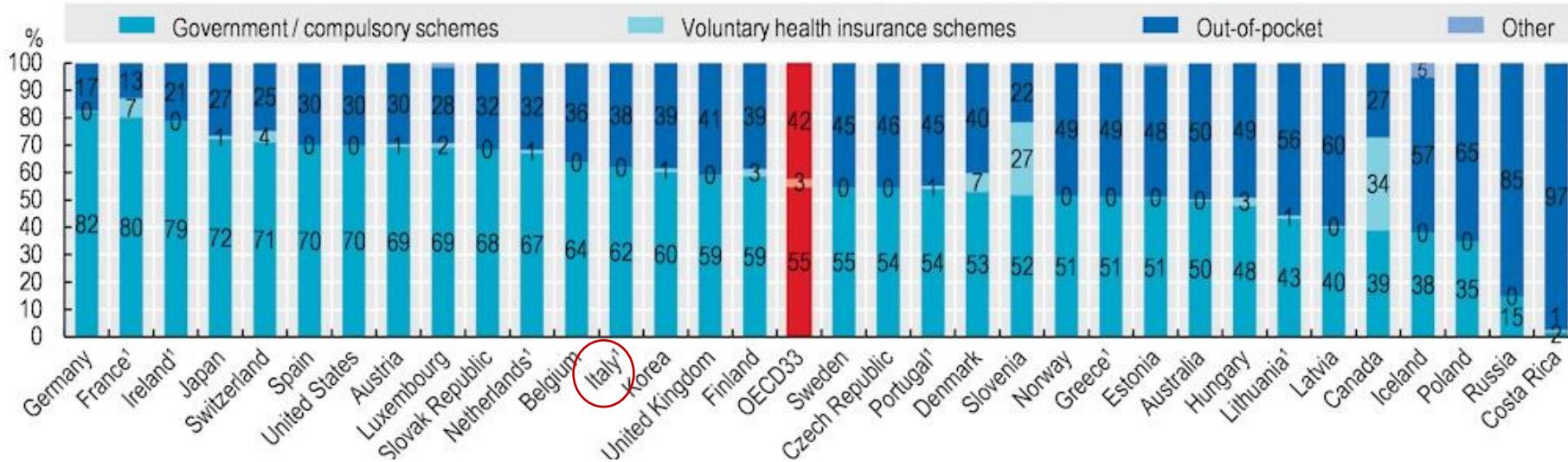
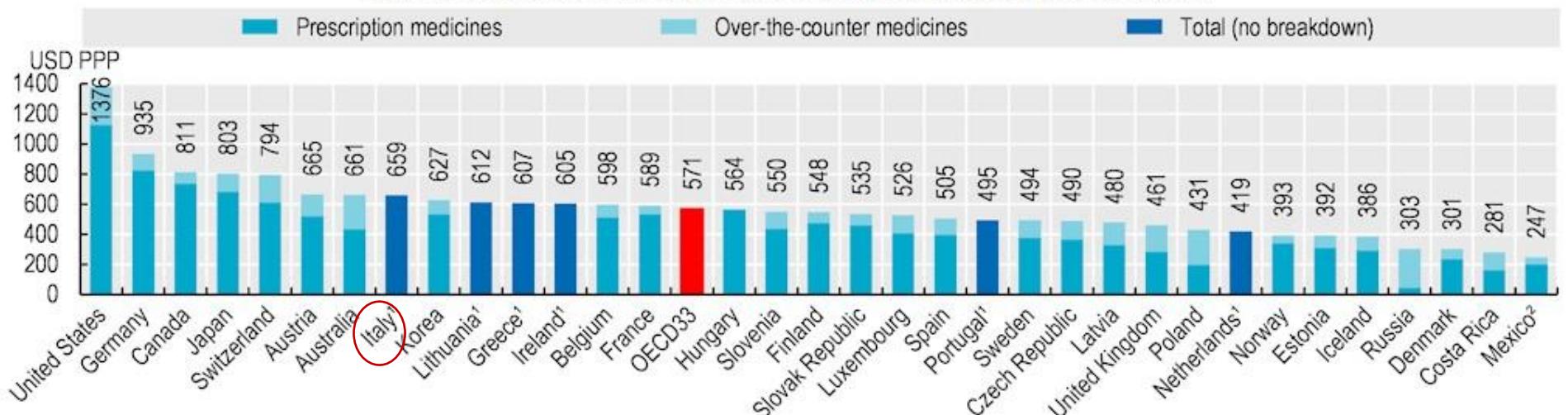


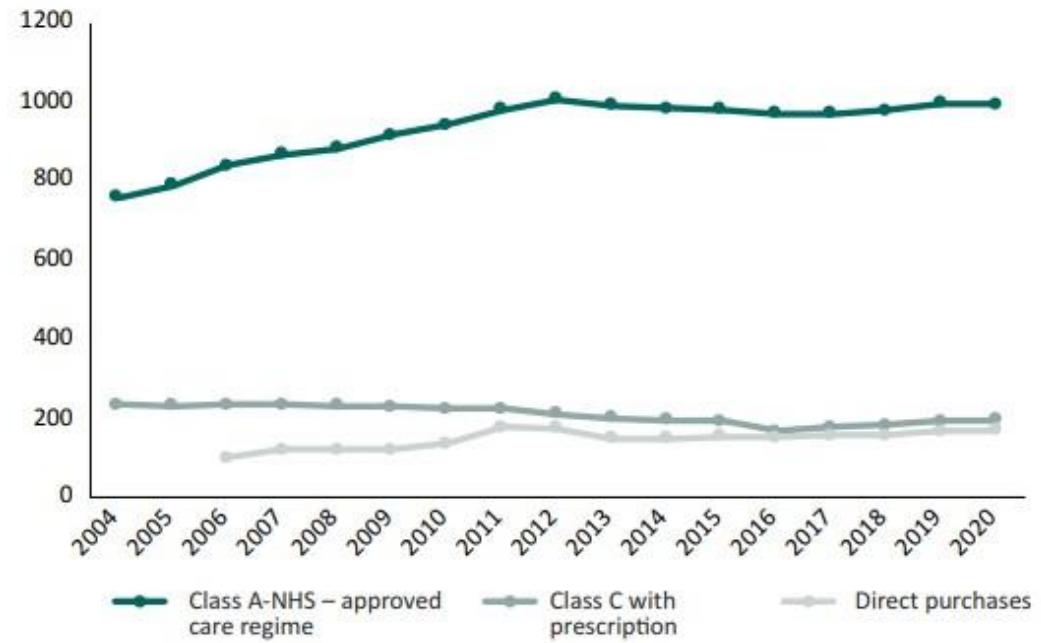
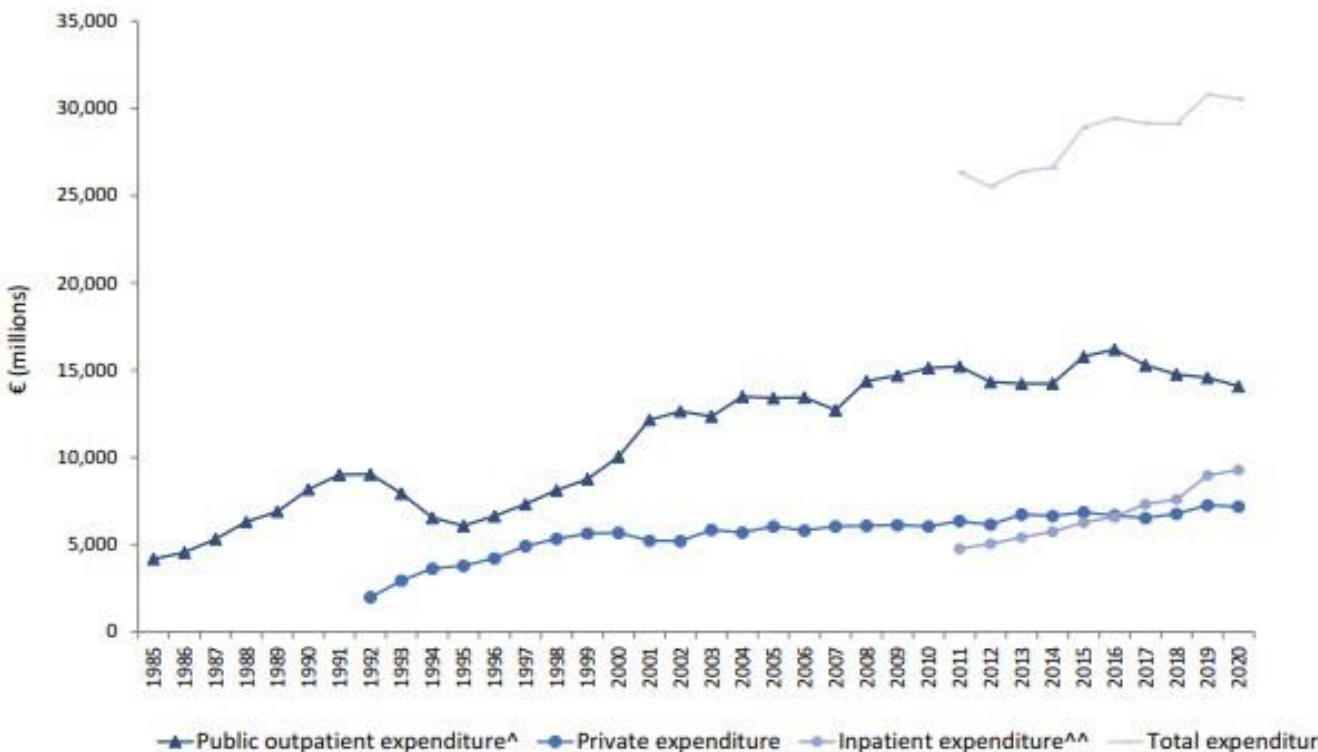
Figure 9.2. Expenditure on retail pharmaceuticals per capita, 2019 (or nearest year)



Source: <https://www.oecd-ilibrary.org/sites/2493ee95-en/index.html?itemId=/content/component/2493ee95-en>

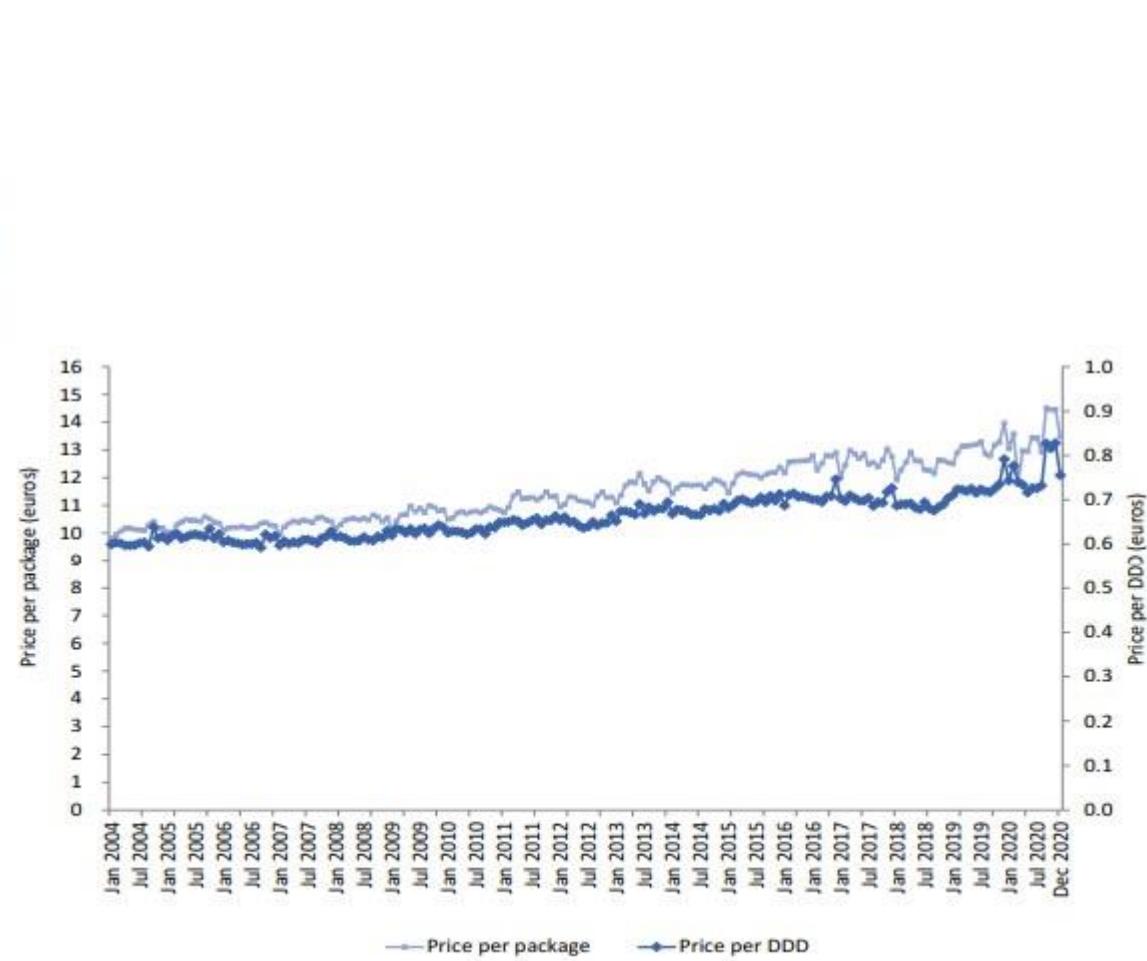
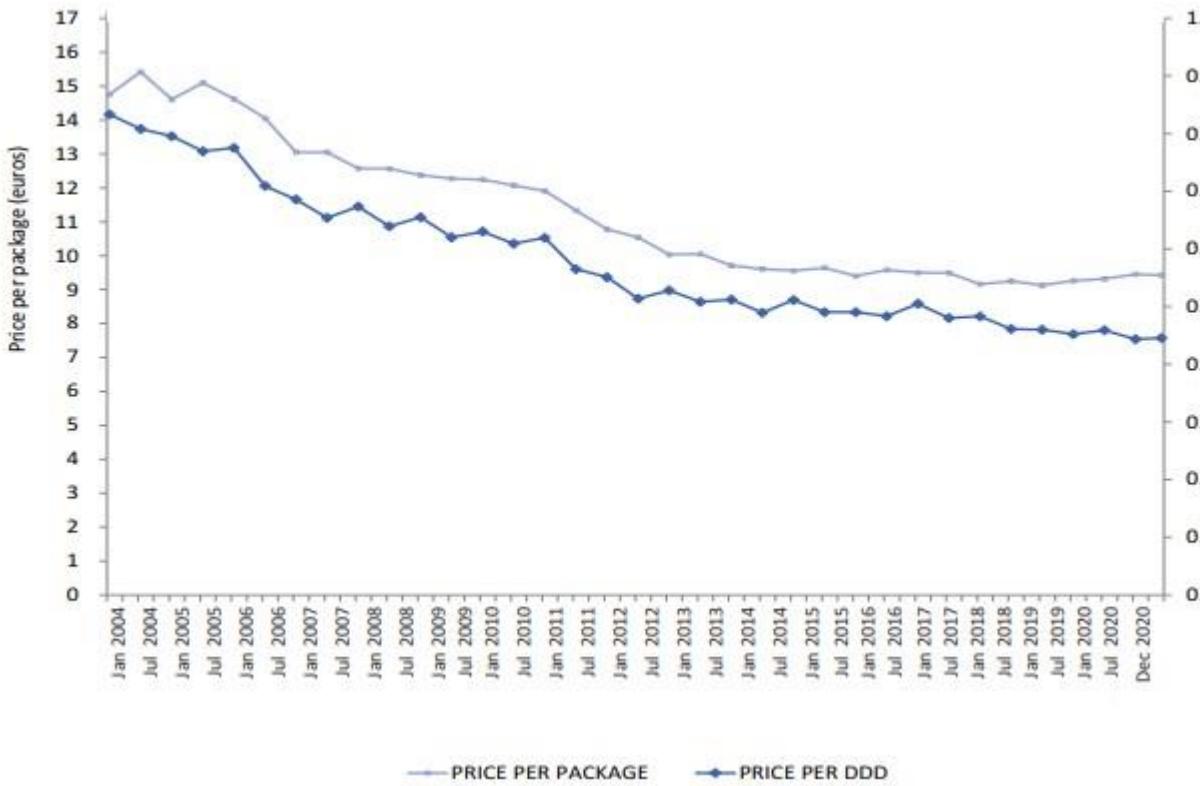
# THE ITALIAN NHS AND PHARMA EXPENDITURES

Italian pharmaceutical expenditure (1985-2020) and consumption (2004-2020)



# THE ITALIAN NHS AND PHARMA EXPENDITURES

Trend in average price of class A-NHS and class C medicines (2004-2020)



# THE ITALIAN NHS AND PHARMA EXPENDITURES

- Medicines considered eligible for NHS reimbursement are included in the national positive list (so-called Prontuario Farmaceutico Nazionale, PFN), either in Class A (for outpatient use) or in Class H (inpatient use), and its purchasing is done by hospitals and sometimes by regions. For some medicines, the national procurement agency CONSIP runs centralized purchases through the “Dynamic Purchasing System” (DPS) by offering an e-procurement platform.
- All in all, public procurement in Italy is massive and anticipated a more global trend that increased in recent years as payers across the EU struggle to balance constrained healthcare budgets and increasing demand. Public procurement regulation is highly complex, also due to the mandatory interplay between national and EU rules.
- Please note: the starting point for every procurement procedure in Italy is a reference price usually provided by the national medicines regulatory agency.

## REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- The Italian Medicines Agency (AIFA) is a public body (administrative agency) operating according to the principles of autonomy, transparency and efficiency, under the direction of the Ministry of Health and the supervision of the Ministry of Health and the Ministry of Economy (see art. 48 DL 269/2003, Ministerial Decree no. 245/2004).
- AIFA regulates medicines for human use in Italy and deals in a strategic ways with every actor of the public and private pharmaceutical landscape, by following the full life-cycle of the medicine (from market access to pharmacovigilance) to ensure its effectiveness, safety and appropriateness as well as access to the national territory.
- AIFA governs the public pharmaceutical expenditures by negotiating drug's pricing and reimbursement on behalf of the NHS, also by relying upon a pervasive monitoring system.
- AIFA supports public authorities such as the same Ministry of Health and Regions for every critical decisions related to the pharmaceutical sector.

# REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- AIFA, among other things, also:
  - ensures innovation, efficiency, and simplification of registration procedures, especially to allow quick access to innovative medicines and to medicines for rare diseases;
  - fosters and rewards investments in Research and Development (R&D) in Italy, by promoting and rewarding innovation, as well as funding independent research;
  - strengthens relations with agencies of other countries, with the European Medicines Agency (EMA) and other EU institutions (such as, more recently, the newly established HERA), as well as with other international organizations.
    - Please note: the EU and the national regulator play two very different roles. While the EMA establishes quality, safety, and efficacy of a drug on a one-by-one basis, AIFA develops comparative evaluations about when and how to use a drug (so-called place in therapy).

# REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- Please note: AIFA is responsible for defining the reimbursement and supply regime for all authorized medicines, by negotiating the price with pharmaceutical companies of drugs charged to the NHS.
  - There are very few institutional comparisons at an international level (possibly the Portuguese Infarmed and the Norwegian Legemiddelverket, certainly not the US FDA)
  - However: no competence on medical devices and vets, both kept under the Ministry of Health
- AIFA also manages the authorization processes for clinical trials, the manufacturing of medicines and active substances as well as inspection and pharmacovigilance activities.
  - As for clinical trials, AIFA played a fundamental role in centralizing their assessment during the Covid-19 pandemic, with ca. 200 trials evaluated in a year.
  - Very recently (mid-2022) two independent and specialized ethical committees of nation-wide relevance have been set up within AIFA for taking care of:
    - Advanced Therapies Medicinal Products (ATMPs)
    - paediatric trials

# REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- A relevant *plus* of AIFA activities is the use of a well-established system of registries for monitoring both medicines usages and expenditures at a national level.
- The technological architecture of the registries is funded by pharmaceutical companies, but fully and independently managed by AIFA. Of over 280 registries currently active, 183 are focused on appropriated uses, 35 include financial-based agreements, and 60 registries refer to payment by results agreements. A substantial set of registries focuses on orphan drugs.
- Based upon its registries AIFA issues yearly publication of the National report on medicines use in Italy (so-called OSMED Report), also available in English, as well as the issue of several specialized reports (<https://www.aifa.gov.it/en/rapporti-osmed>)



## REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- A remarkable result of this oversight capacity is the adoption by AIFA of official notes on appropriated uses, aimed at orienting doctors at better prescribing drugs to patients.
- The availability of specialized registries also allows to develop more smart agreements with pharmaceutical companies aimed at introducing innovative – and as a possible consequence more expensive – products to the Italian market.
- For instance, according to a 2020 OECD report Italy (together with France) is the OECD country with the highest number of active MEAs, and (together with UK) with the highest number of performance-based MEAs (source: <https://www.oecd.org/health/health-systems/pharma-managed-entry-agreements.htm>).



STORY - 13/01/2022

**Italy's reimbursement of Novartis' Zolgensma seen as model for advanced therapies**

# REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- As for the agency's governance, AIFA is managed by a Director General, who is the legal representative of the agency and is subject to spoil system. A board of Directors, made of five members, is appointed by the Ministry of Health and the State-Regions Conference.
- From an administrative viewpoint, AIFA is currently structured in management departments and a series of cross-functional supporting structures (International Affairs Department, the ICT Department, Legal Affairs, etc.). Technical activities are carried on through the following structures:
  - Economic Strategy of Pharmaceutical Products Department
  - Pre-Authorization Department
  - Medicinal Products Authorization Department
  - Post-Marketing Surveillance Department
  - Inspection and Certification Department

## REGULATORS AND GATEKEEPERS: THE ITALIAN MEDICINES AGENCY

- AIFA is supported by two scientific technical committees, the Scientific Technical advisory Committee (CTS) and the Price and Reimbursement Committee (CPR), appointed by decree of the Minister of Health and made up of ten members each.
- CTS deals with the activities related to Marketing Authorization applications of new medicines – through both national and community procedures – by determining the cost-effectiveness ratio. It evaluates and provides an advisory opinion on the classification of medicinal products for reimbursement purposes.
- CPR performs negotiations for the reimbursement of medicinal products; its resolutions are subsequently submitted to the CTS assessment to issue the final opinion.
- Please note: according to a recent law (art. 38 DL 152 of November 6, 2021) and further ongoing discussions, a re-union of CTS and CPR in a new unique technical committee could be expected to happen soon.

# SHOCK THERAPY: COVID-19 AND (EU) ACCESS TO MEDICINES



Rome, city center during the lockdown (March 18, 2020)

- All what previously envisioned refers to medicines' management ordinary life. In fact, the Covid-19 pandemic has put State's organizations under strong pressures in view of coping with the unexpected and variable emergency needs, e.g. new needs to cooperate at an international level for accessing to essential anti-Covid-19 drugs and vaccines in a context of disrupted demand-supply chains.
- AIFA has been at the forefront of the emergency management, fully cooperating with the EU competent counterparts (first of all, the EMA).

# SHOCK THERAPY: COVID-19 AND (EU) ACCESS TO MEDICINES

- At the beginning of the pandemic in the EU (April 2020), the Commission recognized the need for «*swift and smart solutions and agility in dealing with an immense increase of demand*». It then acknowledged the need to exploit all of the flexibilities of the EU legislative framework for public procurement. However, it soon became clear that this was not enough.
- Hence, the Commission from one side offered clarity on the use of accelerated urgent national public procurement procedures, from the other one also encouraged Member States to participate to joint actions by launching an ambitious plan of EU Joint Procurement Agreements (JPAs).
- After a first emergency phase related to devices (gloves, masks, respirators), the Commission focused on therapeutics. So far, more than 20 JPAs for medicines have been signed by keeping the pace with new research, mostly related to new anti-Covid-19 vaccines and monoclonal antibodies.

# SHOCK THERAPY: COVID-19 AND (EU) ACCESS TO MEDICINES

- A few remarks on the Covid-19 experience.
- From the industry viewpoint, the pandemic provided tremendous opportunities both to speed up new research and pursue repurposing of already existing drugs.
- From a public interest viewpoint, pricing strategies of anti-Covid-19 products suffered unprecedented demand-offer asymmetries, coupled with political competition among States for obtaining cures for their citizens (main driver being willingness to pay access).
- The pandemic dramatically shown the need to improve coordination among public authorities at supra-national levels, also in view of preserving fair market equilibria: for instance, results of EU JPAs were mixed, allowing the EU to secure access to essential medicines, but, as recently stated by the EU Court of Auditors, at high costs (<https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=61899>).
- All in all, the strategic value of pharmaceutical assets became evident in a context of disrupted value chains – and disruption threats are here to stay, with countries now more aware of the need to protect their industries within the new geo-economic scenario.

# ITALY AND PHARMA: AN INDUSTRIAL VIEW

- Pharma & Biotech: last week's British-Italian *querelle*



 **Italy in UK**  @ItalyinUK  
Flag Italy government organization  
 a remark from Ambassador @InigoLND @ItalyinUK  
#economist #italy

Dear Sir,  
Reading the Economist is a pleasure for every diplomat. And, as the Italian Ambassador to the United Kingdom, even more so since you dedicate constant attention to Italy, so much loved by the British people.  
Such is the case with your latest cover, unfortunately inspired by the oldest of stereotypes. Although spaghetti and pizza are the most sought after food in the world, as the second largest manufacturer in Europe, for your next cover we would suggest you to pick for a change from our aerospace, biotech, automotive or pharmaceutical sectors.  
Whatever the choice, it would cast a more accurate spotlight on Italy, also taking into account your not so secret admiration for our economic model.

All the best,

Inigo Lambertini  
Ambassador

  
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# ITALY AND PHARMA: AN INDUSTRIAL VIEW

- A (much needed) lexicon, first.
  - **Pharma:** the pharmaceutical industry discovers, develops, produces, and markets drugs or pharmaceutical drugs for use as medications to be administered to patients (or self-administered), with the aim to cure them, vaccinate them, or alleviate symptoms (*Ullmann's Encyclopedia of Industrial Chemistry*, 2007).
  - **Life Science (LS):** a branch of science (such as biology, medicine, and sometimes anthropology or sociology) that deals with living organisms and life processes – usually used in plural (*Merriam-Webster Dictionary*).
  - **Biotech:** technology or industrial processes using living things such as cells and bacteria, especially in order to produce medical treatments (*Cambridge Dictionary*).
  - **Med-Tech:** it covers any technology that can be used in a care setting, which covers disposables, capital equipment and surgical procedure innovations, through to implant technology, biomaterials and connected health IT (*MacMillan Dictionary*).

## Innovation is the DNA of Italian life science sector

Italy has the best and fastest growing **Life Science** sector in Europe it is, underpinned by an ecosystem which supports innovation, and **accounts for 11% of the Italian GDP**. Italy has the largest pharmaceutical industry in Europe with **gross value add revenues of €32bn**, it is the fastest pharmaceutical exporter in Europe and has a strong mix of large pharmaceutical companies and also innovative and expanding SMEs across **biotech, med-tech and pharma**.



### ► Science Parks & innovation hubs

► Among the main **Science Parks** operating in the field of Life sciences, we find:

- **The Science and Tech Park of Sardinia** equipped with *Tech Platforms available for companies*
- **Castel Romano Technopole in Rome** hosting several labs and companies, some of which dedicated to experimental research, food biotech and testing, biomedical R&D
- **The TLS Park In Siena** hosting GSK Vaccines and Diagnostics R&D activities
- **The Canavese Bio Industry Park in Turin** dealing with scientific results in the fields of Chemistry, Molecular Biology, Proteomic, and Bioinformatics
- **The AREA Science Park in Trieste** operating in the fields of Biotech, Diagnostics, Chemicals, and Biomedical Technology at European level
- **Open Zone in Milan**, a scientific healthcare campus focused on open innovation

► Italy also hosts many other **life sciences-related centers of excellence**, a selection of which is indicated in the map



Source: <https://www.ice.it/en/invest/innovation-dna-italian-life-science-sector>

## ITALY AND PHARMA: AN INDUSTRIAL VIEW

- «Tourists likely aren't flocking to Italy to see its pharma manufacturing facilities, but nonetheless, the drug industry is carrying its weight in the Italian economy.
- Based on 2019 data, **Italy is the biggest pharmaceutical producer in the European Union, both in terms of total manufacturing capacity, as well as in manufacturing capacity per capita.** Italy's pharma production value reached €34 billion (USD \$41.2 billion) in 2019. Much of the sector's success can be attributed to its exports — over 80 percent of the drugs made in Italy leave the country.
- The quality of workmanship is affirmed by the numerous multinational drugmakers, such as Novartis, GlaxoSmithKline and Pfizer, who choose to manufacture in Italy. **Italy is also the EU leader in contract development and manufacturing organizations (CDMOs);** the sector has seen steady growth in production for the last decade and Italian CDMOs now rank first in manufacturing value. Capitalizing on access to the European market, leading global CDMOs, including Patheon (Thermo Fisher Scientific), Recipharm and Catalent, have commercial manufacturing facilities in Italy.» (source: <https://www.pharmamanufacturing.com/home/article/11294442/global-dose-focus-on-italy>)

# ITALY AND PHARMA: AN INDUSTRIAL VIEW

## RESEARCH

**1.6 BN**  
INVESTMENTS  
BY COMPANIES

17%  
of added  
value

### INVESTMENT 2020

€1.6 bn the **resources invested in R&D in Italy** by pharmaceutical companies in 2020. A value equal to 17% of the sector's value added (against average of 1.4% in the economy at large).

**1<sup>st</sup> PLACE**  
**ITALY**

### OPEN INNOVATION

1st place for Italy for Open Innovation investments per employee and for the percentage of companies with **cooperation agreements with universities and public research centres** (80%).

**700 M**  
INVESTMENTS  
2020

- access to medicines
- new knowledge
- skills
- economic benefits

### CLINICAL STUDIES

€ 700 m are invested each year by our companies in clinical studies, **generating new knowledge**, skills and savings for the public and private health system, and making new treatments available.



### PUBLICATIONS ON COVID-19

1st place for Italy in the EU (4th in the world) for **scientific publications on Covid-19** of which more than 75% were "open access" publications.

## PRODUCTION

**65 BN**  
including allied  
production

**34 BN**

### PRODUCTION 2020

34 billion is the value of the **pharmaceutical industry's production in Italy in 2020**, along with € 1.4 billion in investments in high-tech plant. The value rises to 65 billion when upstream sectors' production is considered.

**+48%**  
EU PARTNERS

**+74%**  
ITALIA

### EXPORT GROWTH 2015-2020

at +74% export growth in the period 2015-2020 is far superior to that of our EU partners (+48%). The average value of exports also grew (+50%), **which is another indicator of innovation and the quality of our production**.

**+12%**  
**ITALY**

OTHER MAJOR  
EUROPEAN COUNTRIES

### VALUE ADDED PER EMPLOYEE

+12% is the differential between Italy and the average of the major European countries in terms of value added per employee in pharmaceuticals, a fact that highlights the **high technological level achieved by production in Italy**.

**ITALIA 1<sup>st</sup> PLACE**  
IN THE EU

### CONTRACT DEVELOPMENT

1st place in the EU for Contract Development and Manufacturing Organization, an activity with high added value, **in active partnerships with other pharmaceutical companies**.

(source: [https://www.farmindustria.it/app/uploads/2017/12/Farmindustria2021\\_ENG\\_2021-07-28.pdf](https://www.farmindustria.it/app/uploads/2017/12/Farmindustria2021_ENG_2021-07-28.pdf))

# ITALY AND PHARMA: AN INDUSTRIAL VIEW

## COMPANIES IN THE TERRITORY

2020 DATA

PRODUCTION  
€34 BILLION

EMPLOYEES  
**67** THOUSAND  
MORE THAN  
145 MILA  
WITH ASSOCIATED  
PRODUCTION

OF WHOM 90%  
GRADUATES  
OR H.S.C GRADUATES

85%  
DETERMINED  
BY EXPORT  
The last 5 years

INVESTIMENTI  
€3 BN

1.4  
PRODUCTION  
PLANTS



**200**  
MANUFACTURERS  
PHARMACEUTICALS  
AND VACCINES

## EMPLOYMENT

EMPLOYEES  
**67** THOUSAND

OF WHOM 90%  
GRADUATES  
OR H.S.C GRADUATES

+ 16%  
GROWTH IN  
UNDER 35s

### GENERATIONAL TURNOVER

There has been an over 16% growth in the number of under 35s in the pharmaceutical industry, an indication of a virtuous generational turnover.

### PHARMACEUTICAL EMPLOYEES

There are 67 thousand pharmaceutical employees in Italy, a figure that has grown by over 12% in the past 5 years (against the economy's average of +2%). 90% are university and H.S.C graduates..



### WOMEN EMPLOYEES

43% of pharmaceutical employees are women, a much higher figure than in the rest of the economy (29%). Moreover, a very high percentage of women hold position of responsibility (42% of executives and middle managers are women), while accounting for 52% in R&D.



### WELFARE AND TRAINING

1st place in Italy among the industrial activities as regards, welfare, training and parenting support.

# ITALY, HEALTH, AND PHARMA: SOME CONCLUSIONS

- Italy has both an outstanding tradition and remarkable perspectives in the pharma industry, to be duly put in context within some special national features, namely:
  - a well-established universal healthcare system with integrated R&D activities (clinical trials) operated by a wide net of hospitals and healthcare centers;
  - strong industrial tradition also in critical pharmaceutical side-sectors (e.g. mechanical engineering, chemistry, packaging);
  - academic excellence delivered at a low cost, with a potential for relationships with industrial sectors that needs to be further developed;
  - privileged position of crossroads and convergence for numerous industrial and research experiences related to biotech, in particular for food and med-tech;
  - a political environment firmly «atlantic» and market-oriented, but somehow unpredictable in the short term.
- When coupled with a political vision of longer term and FDIs interested to go beyond simple contract manufacturing, the Italian pharma ecosystem will be able to deliver more than today, both to patients and companies.

# THANK YOU

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