

Exchange of views with EMA/HMA Supply Group

Second wave risk demand planning for Covid19





Covid-19 Situation

March-June first wave: Initiated industry-Supply group cooperation

Medicines for Europe-EFPIA coordinated ICU Kearney project first wave planning

Supply group: coordination on EU & member state responses to first wave

Second wave: Monitoring localised waves linked to vacation & loosening of restrictions

Future risks:

- Return to work/school
- Flu season combination with Covid-19
- External factors: demand in Americas//outbreak in Asia affecting supply chains





ICU medicines project recap

1st wave demand assessment for ICU medicines (95% accuracy for COVID patient calculation) and total supply

1st wave ind-gov cooperation: dramatic increase in supply (reg flex) & better demand calculation (#of patients & meds consumption)

Country allocation: More Gov. coordination to improve allocation across hospitals/countries

Second wave: how to reinitiate industry-Government cooperation?





Sharing demand projections for industry planning

ECDC
data projection too
short term; collect
and aggregate other
sources for 2nd wave
scenario

EMA-HMA Supply group sharing demand projections: info for industry?

Adapt to new variables: lower hosp. rate; changes to treatment protocols -->impact on ICU med demand?



A model was developed to estimate the demand of critical medicines for a potential second COVID-19 wave

Demand forecasting model

- Initially developed by Medicines for Europe and Accord Healthcare for the first COVID-19 wave
- Enhanced with additional parameters by Kearney for a potential second COVID-19 wave

Approach

- Favoring overestimation of cases due to the fact that the risk of underestimating is higher than the risk of overestimating
- Not reflecting the impact of any behavioral changes, social distancing, or other interventions which could influence case numbers
- Not addressing the impact of tourism potentially occurring in late summer/early autumn
- Using number of reported deaths per country as base for estimation
- Using three different parameters to plan for future demand scenarios (# deaths, MV usage, treatment duration)

Data sources

- Actual data of number of daily deaths as of May 21st 2020
- Worldometer Coronavirus reports
- WHO Situation Reports
- Expert opinions
- Secondary research, e.g.
- Robert-Koch-Institute, Germany
- International Long-Term Care Policy Network (https://ltccovid.org/)
- ICNARC Intensive Care National Audit & Research Centre
- Various scientific articles (e.g., Grasselli et al., JAMA; Bhatraju et al., NEJM)

Key assumptions

- Herd immunity will not be achieved by any country during first COVID-19 wave
- Individual country responses to a second COVID-19 wave will be identical to responses to the first wave
- The development of the second COVID-19 wave will be similar to the first wave
- Only COVID-19 related deaths occurring in ICUs will cause demand in critical medicines
- Number of daily deaths will decrease around 28-days post-lockdown



Demand forecasting model

Accuracy vs real world data

	Model version: 1 (Data lock point 21 Apr 2020)			
	Model prediction 01 March 2020 17 June 2020	Actual worldometer 01 March 2020 17 June 2020	% difference	
Total EU	170,680	174,639	-2.3%	
EU-5	139,769	142,239	-1.7%	
Spain	26,405	27,136	-2.7%	
France	28,707	29,575	-2.9%	
UK	45,432	42,153	7.8%	
Italy	30,953	34,448	-10.1%	
Germany	8,273	8,927	-7.3%	

	Model version: 2 (Data lock point 11 May 2020)			
	Model prediction 01 March 2020 17 June 2020	Actual worldometer 01 March 2020 17 June 2020	% difference	
Total EU	163,923	174,639	-6.1%	
EU-5	134,205	142,239	-5.6%	
Spain	28,212	27,136	4.0%	
France	28,709	29,575	-2.9%	
UK	35,879	42,153	-14.9%	
Italy	32,979	34,448	-4.3%	
Germany	8,426	8,927	-5.6%	

Three different scenarios – best, base and worst case – will indicate medicines demand for a potential second COVID-19 wave

Selected scenario overview for a second COVID-19 wave Key characteristics

		Best Case	Base Case	Worst Case
Scenario illustration for molecule demand		Lowest absolute Lindemand (kg)	kely demand (kg)	Highest likely demand (kg)
Model parameters	# of new deaths vs. first wave	- 50%	Same	+ 50%
	% patients on MV	50%	50%	100%
	Treatment duration		Likely	
Total # new ICU patients (October 1st – November 30th 2020)		33'153	66'306	99'459





EU & MS Policy action

Dialogue with industry: Reg. Flex, shortages, Comp. guidance

on demand modelling or scenarios for second wave

Visibility for industry on national inventories

Better MS coordination: CivilProtect-MoH-NCA-Hospitals-Industry





External factors

Second waves in US, Brazil,*

Mexico* = demand for medicines

Indian second wave: limited impact on supply chain

India-China military tensions: uncertain impact--> to monitor

Can we improve EU dialogue with key partners?



Going forward, the industry has three clear asks to the European Commission and the member states



Clear volume commitments

- Each member state should make clear and legally binding volume commitments
- There should be no refund of surplus purchases
- Delivery in instalments should be possible (based on need, contractually determined)



Clear guidelines for storage

- Medicines Reserve should be warehoused by industry, wholesaler or distributor
- Additional expenses (e.g., for warehouse space) should be covered/insured
- Unused medicines can be given to hospitals, be donated or moved to other member states in need (in contractually agreed volumes)



Clear allocation policy

- The need-based access of all members states to EC Medicines Reserve should be ensured
- The EC should manage distribution to member states using industry/ wholesaler/ distributor logistics
- National agencies/ governments should manage distribution of stock within countries
- Appropriate regulatory flexibility that was granted in the first wave should be maintained (e.g., for national licensing)

Source: Medicines for Europe; Kearney



Clear asks for predictable results



Accurate <u>demand forecast</u> based on expected <u>patient needs</u> to prevent <u>speculation and secure necessary manufacturing capacity</u>



Volume commitments are necessary to mobilize stock to where it is really needed → **shared responsibility**



Clarity and coordination at <u>national</u> level are important to understand <u>inventories/stock levels remaining</u> – preparedness cannot be done in isolation



Thank you