# **Cost-Efficiency and the Opportunity for Expanded Treatment Access with Incremental Increases in Biosimilar Adalimumab** and Tocilizumab Use: A European Perspective



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# Objective

- Biosimilars can help to improve patient access by providing cost-effective treatment options<sup>1</sup>.
- This study assessed the direct cost **savings and expanded** patient access (under budget neutrality) that could be realized from:
  - **Incremental increased** use of adalimumab biosimilars.
  - Introduction of tocilizumab biosimilars.

(		ost	Market Share			
Country	<b>Reference</b> <b>Product</b> <sup>2,a</sup>	<b>Biosimilar</b> <sup>2,b</sup>	Base Case <sup>3,c</sup>	Conversion Scenarios		Panel Size <sup>4,d</sup>
				Mid	Tot	
ADALIMUMAB INPUTS						
France	€6,340	€5,404	46%	73%	100%	70,000
Germany	€19,051	€9,609	76%	88%	100%	90,000
Italy	€13,891	€10,110	82%	91%	100%	40,000
Spain	€13,368	€11,815	67%	84%	100%	60,000
UK	€10,661	€9,608	85%	93%	100%	100,000
TOCILIZUMA	B INPUTS					
France	€10,513		0%	46%	100%	17,000
Germany	€19,801		0%	76%	100%	19,000
Italy	€13,712		0%	82%	100%	7,000
Spain	€13,778		0%	67%	100%	12,000
UK	€12,649		0%	85%	100%	15,000

### Model Parameters

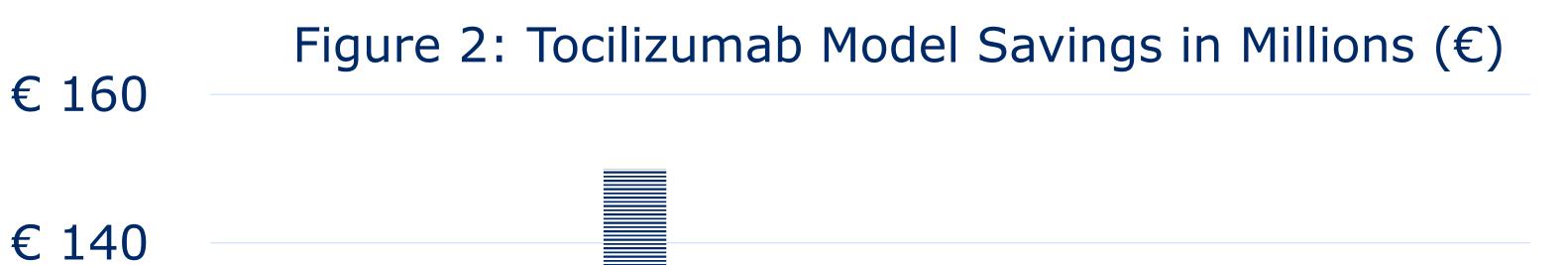
# Methods

- Separate **ex-ante** analyses were conducted for France, Germany, Italy, Spain, and the UK. Analyses were parameterized using countryspecific list prices, unit volumes annually, and market shares for each therapy.
- Three discounting scenarios were tested for tocilizumab (20%, 30%, and 40%).

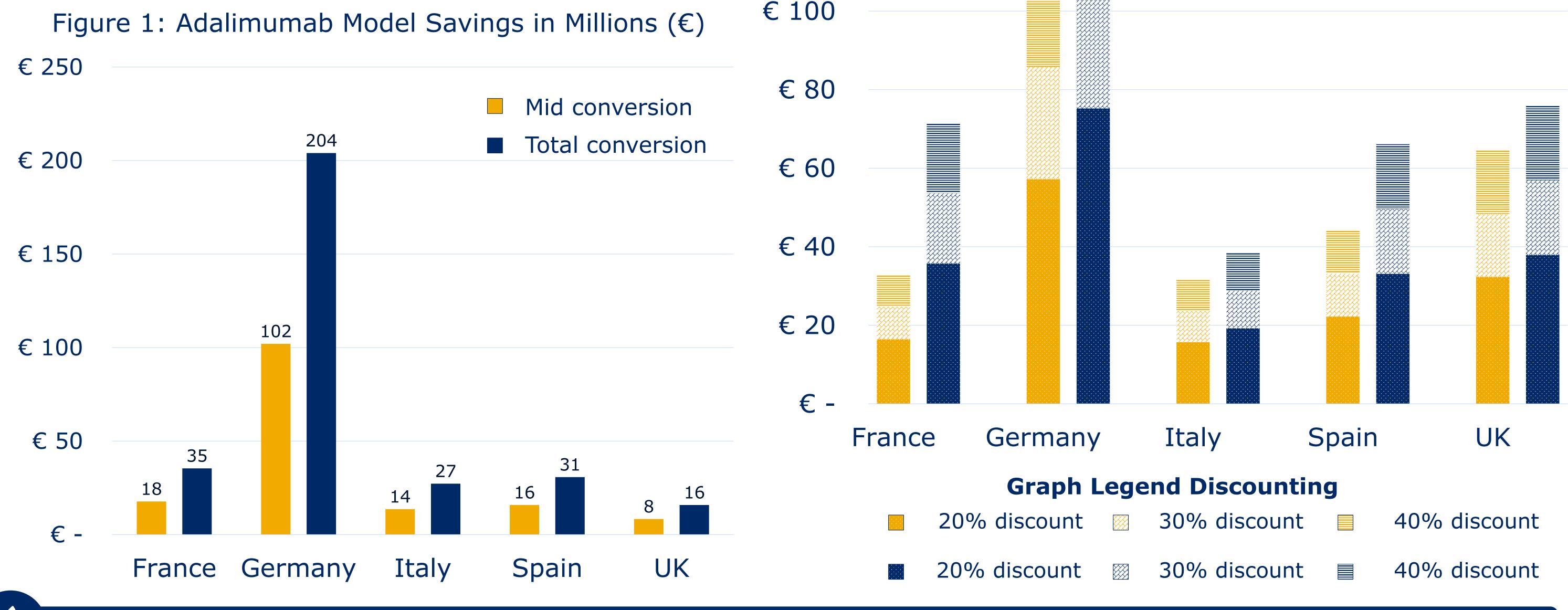
<sup>a</sup> Annualized according to manufacturer-to-wholesale list price of RoActemra (52 prefilled pen 0.9 mL 162 mg dose, weighted average 80 kg with 8mg/kg dose) and Humira injection (26 prefilled pen 40 mg dose). <sup>b</sup> Weighted biosimilar prices based on market share. <sup>c</sup> Base case market share informed by IQVIA data<sup>3</sup> for ADA while TCZ represents world-without biosimilar (current day). <sup>d</sup> Panel size is based on the units sold in each country in 2022 using the same dosing assumption mentioned above.

#### Results

- Use of adalimumab biosimilars resulted in savings of up to €204 million in the 100% conversion (Figure 1) while use of tocilizumab resulted in savings up to  $\leq 150$  million in the 100% conversion (Figure 2).
- Increased use of adalimumab biosimilars yielded up to 6,549 (France), 21,223 (Germany), 2,693 (Italy), 2,601 (Spain), and 1,644 (UK) additional patients treated.



• Introduction of tocilizumab biosimilars yielded up to 11,333 (France), 12,667 (Germany), 4,667 (Italy), 8,000 (Spain), and 10,000 (UK) additional patients treated.



€ 120

Figure 1: Adalimumab Model Savings in Millions (€)

## Conclusion

- The model demonstrated that significant savings can be realized by increasing current-day use of adalimumab biosimilars and the introduction of a tocilizumab biosimilar in France, Germany, Italy, Spain, and the UK.
- The economic savings provided by the increased use of more affordable adalimumab and tocilizumab biosimilars can be used to expand access and increase the total number of patients able to receive treatment, which may have associated benefits such as cost-offsets and event avoidance<sup>5</sup>.

Abbreviations: ADA = adalimumab; IV = intravenous; NA = not applicable; SC = subcutaneous; TCZ = tocilizumab; Tot = total;; UK - United Kingdom. Disclosures: KS is an employee ofFresenius Kabi, a manufacturer of biosimilar medicines. KS, MAG and NF are employees of EVERSANA, who received consulting fees from Fresenius Kabi. References: 1. Kvien TK et al Semin Arthritis Rhem 2022 52:151939 2. Data on File 3. IQVIA (2022). MIDAS Quarterly Sales Audit from Q1 2018 to Q4 2022: Adalimumab, Tocilizumab. Accessed: March 22 2022 5. Johnston SS et al Drug Real World Outcomes 2(1), 99-109.



Mid conversion

Total conversion