DOLON

A collaborative approach to optimising managed entry agreements for innovative therapies

Amanda Whittal Lead Consultant Dolon Ltd.

Confidential

25 April 2024

Disclaimers

- The Value-Based Negotiation Framework has been originally developed by Amanda Whittal, Claudio Jommi, Gérard De Pouvourville, David Taylor, Lieven Annemans, Lies Schoonaert, Sebastian Vermeersch, Adam Hutchings and Julien Patris with the financial support of Alnymam Pharmaceuticals
- The Value-Based Negotiation Framework mock-up negotiations have been conducted by Dolon and Hict, with the support of Alnyam Pharmaceuticals, argenx, Ultragenyx
- The VBNF Experimental Research has been conducted by ESSEC Business School with the financial support of Alnylam

2

We live at the age of breakthrough innovation and biotech renaissance...

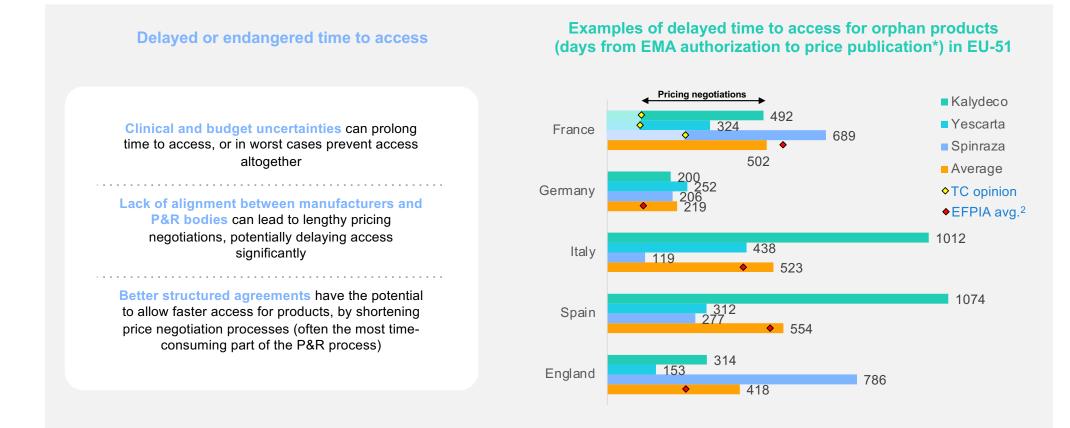


- Evolving understanding of biology and disease pathophysiology are opening the door to targeted therapeutic approaches
- Cutting-edge technologies are leading to unprecedented, diseasemodifying treatments (e.g., cell and gene therapies)
- Emergence of new research and development models and advancements in the field of computational science and artificial intelligence
- New generation of biotech companies with a focus on developing treatments for rare and severe diseases, or high unmet need patient populations

DOLON

3

...but access to innovation is increasingly complex and often delayed or not possible at all



*Methodological differences between this analysis and the EFPIA study explain the delta observed for Germany. While not explicitly stated, the EFPIA study likely considered an earlier timepoint for end of procedure.

1. Dolon analysis based on data available from EMA (https://www.ema.europa.eu/en/medicines/download-medicine-data#european-public-assessment-reports-(epar)-section), Legifrance (https://www.legifrance.gouv.fr), G-BA (https://www.g-

ba.de/bewertungsverfahren/nutzenbewertung/), Gazzetta Ufficiale (https://www.gazzettaufficiale.it/), BotPlus (https://botolusweb.portalfarma.com/), NICE (https://www.nice.org.uk/guidance/

2. EFPIA Patient W.A.I.T. Indicator 2018 survey, https://www.efpia.eu/media/412747/efpia-patient-wait-indicator-study-2018-results-030419.pdf

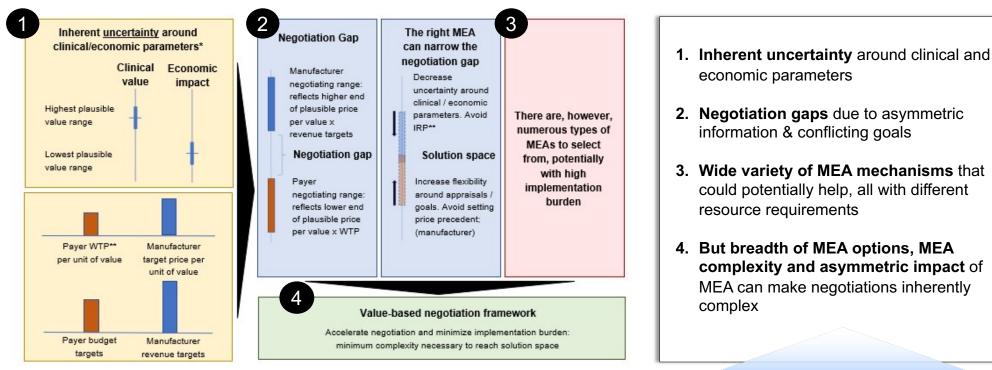
A collaborative, pragmatic and transparent approach based on a common language could help address this issue by facilitating more efficient negotiations and agreements



DOLON

Confidential

The 'value-based negotiation framework' (VBNF) aims to provide a structured framework to address uncertainties, while balancing payer/manufacturer contexts and constraints

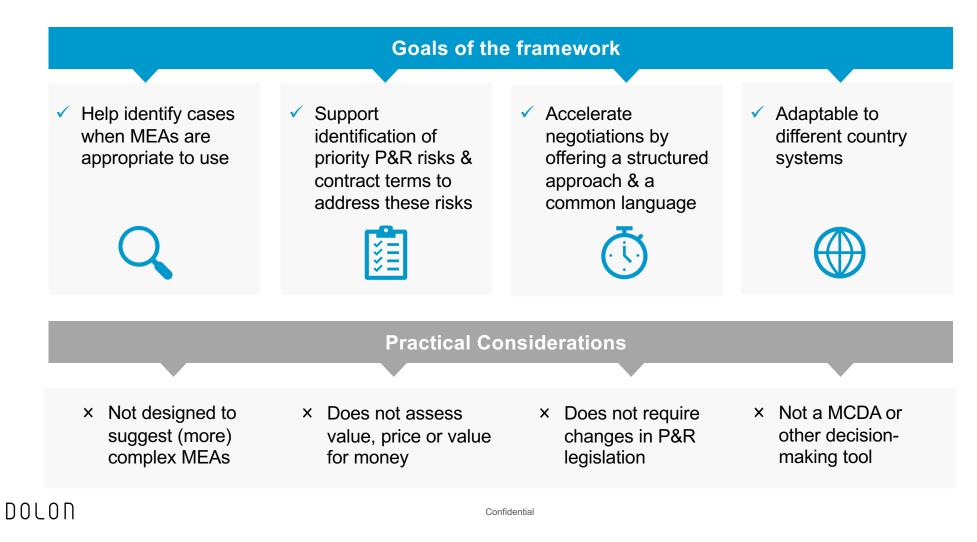


*Figures not intended to represent actual quantification of uncertainty **WTP= Willingness to pay; IRP = International reference pricing

The VBNF can help navigate these options in a faster, more transparent way

DOLON

The VBNF aims to better structure negotiations of MEAs for innovative therapies in a pragmatic way



The VBNF aims to bridge the negotiation gap between payers and manufacturers in a timely manner



Matrix 1	Core area	Topic	Sub-topic	Rationale for consideration / objective	
		Epidemiology	Prevalence	Impact on size of target patient population	
			Incidence	Impact on cost profile over time	
		Patient population characterization	Ape of onset	Impact on willingness to pay	
			Existence of patient subocoulations		
			Other patient characteristics (e.o. gender, ethnicity, risk factors, genetic	Impact on clinical uncertainties for specific subgroups	
			mutation)		
		Disease manifestation	Disease progression (e.g. acute vs. chronic, attacks)	Characterise the disease profile, which sets up for the treatment goals	
	Disease backgrounder		Impact on mortality and life expectancy / prognosis		
			Impact on morbidity	identify the urgency to treat.	
			Impact on quality of life	realized and red and the same	
			Extent of variability in disease presentation and severity		
		Economic burden of disease	Economic and societal impact (e.g. missed school days, productivity)	Present a holistic view of the disease impact this influences the perception o burden of disease sets up for discussion of spillover effects	
		Diagnostic pathway	Time to diagnosis		
			Diagnosis method (e.g. biomarker test, clinical differential, diagnosis of	Impact on startistop rules, reimbursement criteria (e.o. restriction to sub-	
			exclusion)	populations), budget impact	
			Diagnosis rate	populations), cooget impact	
			Other elements		
		Patient care pathway	Availability of clinical guidelines	Cushly how the patient care experience is structured in the health system; the helps identify potential changes to the health system brought about by the no treatment.	
			Patient experience		
			Treatment capacity in the healthcare system		
			Treatment location (e.g. centre of excellence)		
		Standard of care	Existence of (a) therapeutic option(s) (approved or off-label)	Guanity the extent of unmet medical need	
			Efficacy of SoC		
			Safety of SoC		
			Cost of SoC		
			Date of introduction of SoC		
			Shortcomings of SoC		
		Technology presentation	Treatment goal (e.g., curative, disease modifying, symptom management, slow	Impact on perception of innovativeness	
			progression, attack prevention)		
			Nechanism of action	Impact on perception of innovativeness	
			Node of administration	Impact on cost structure and variability in costs	
			Posology (per label)		
Product profile			Duration of treatment (per label)		
			Regulatory designations (orphan, PRIME)	impact on the perception of innovativeness and level of uncertainty	
		Regulatory background	Type of approval (e.g., conditional, under exceptional circumstances)	impact on size of the patient population (current population, extent of future	
		regularity saciground	Current and anticipated additional indications	inipaci un size or me papenic popularun (contenic popularun, extent or romi	

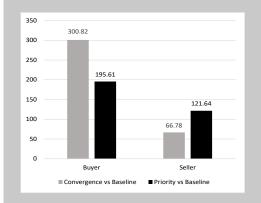


			SOLUTION	IS MATRIX			
olutions legend:							
Capacity to mitiga	te risk: to be determin	ed based on expec	ted impact on four key	parameters			
easibility of impli not considered low moderate high	ementation: consideri	ng individual prefer	ences and contexts, to	be rated as:			
		Selected te	rms with optimal risk	-mitigating capacity	/ + feasibility		
Priority concern	Potential agreement term	Description	Expected impact on real world health outcomes	Expected impact on real cost per patient	Expected impact on budget impact/revenue (cost per patient + population)	Expected impact on cost- effectiveness	Implementatio feasibility
Priority concern		Description	on real world	on real cost per	on budget impact/revenue (cost per patient +	on cost-	Implementatic feasibility
Priority concern		Description	on real world	on real cost per	on budget impact/revenue (cost per patient +	on cost-	Implementatio feasibility
Priority concern		Description	on real world	on real cost per	on budget impact/revenue (cost per patient +	on cost-	Implementa feasibility

The VBNF demonstrated its potential effectiveness in real-life

lock-up negotiations	Large scale trial of VBNF based on experimental economics			
 8 Multistakeholder Roundtables with 40 Participants (approx.) from Health Authorities, NGOs, industry Live game at various congresses incl. World Evidence, Pricing and Access Congress 2020, ISPOR 2021 and 2022 Simulations at ESSEC and Solvay Business School 	 238 participants split between two groups (manufacturers & NHS) 119 bilateral negotiations 6 variables for negotiations: cost per patient, number of patients (cap), local investment, clinical risk-sharing, time to access, investment in RWE Negotiators had different goals (converging on some, diverging on others) 3 Arms: (1) No "nudge" or incentives to collaborate (2) Nudge 1: "convergence": agree on variables with converging interest first (3) Nudge 2: "priority" – information sharing about their goals 			

Results: Collaborative & Transparent negotiations increase the effectiveness of negotiations



- Nudging negotiators towards early wins (convergence) or information sharing (priority), created value
- Total value created at dyad level was increasing, concave function in relation to time spent negotiating
- The surplus associated to the two nudges i.e., 'advice-based treatments essentially accrued to the buyer / NHS. The payoff for the seller also increased, but the change was not statistically significant

The VBNF is a practical tool to support faster, more efficient negotiations



Summary

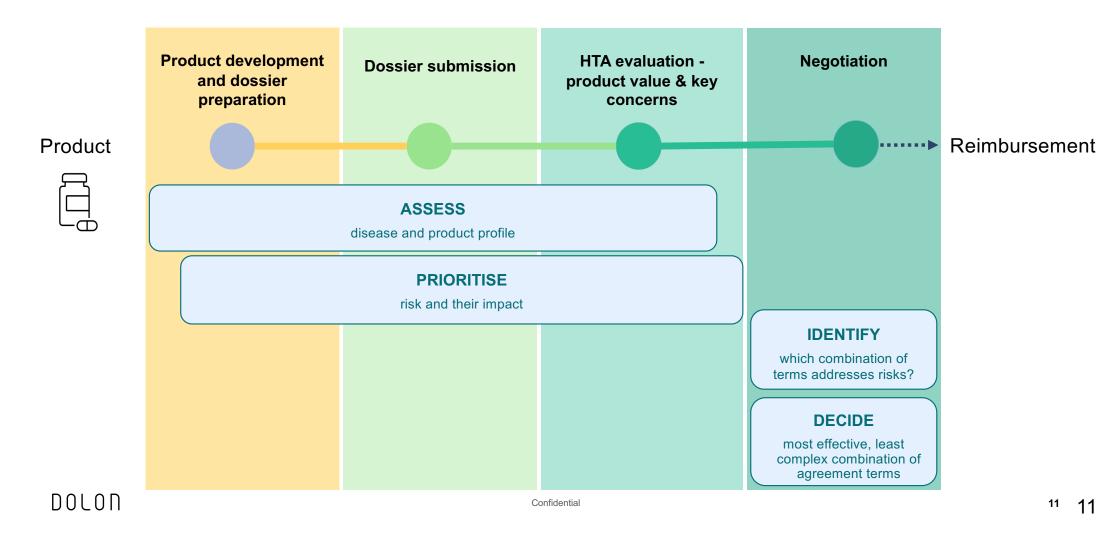
Description of methodology Conceptual framework Practical application tools Summary

Lab experiment to observe and analyze negotiation of a multiattribute, advanced therapy contract

More integrative outcomes and more trust were achieved when recommending negotiators start the negotiation with convergent criteria / communicate their priorities to the other party

DOLON

The framework could be used across different stages of the lifecycle and P&R process – creating nudges or processes towards convergence and information sharing



Thank you!

- Lamiraud, K., Patris, J., & Vranceanu, R. (2024). Can attentional nudges improve efficiency of bilateral multi-attribute negotiations?. Journal of Behavioral and Experimental Economics, 102205.
- Lamiraud, Karine and Patris, Julien and Vranceanu, Radu, Experimental Evidence on the Value of Time and Structure in Market Negotiations (February 8, 2023). ESSEC Business School Research Paper No.2023_02, Available at SSRN: <u>https://ssrn.com/abstract=4358819</u> or <u>http://dx.doi.org/10.2139/ssrn.4358819</u>
- Whittal A, Jommi C, De Pouvourville G, et al. Facilitating More Efficient Negotiations for Innovative Therapies: A Value-Based Negotiation Framework. *International Journal of Technology Assessment in Health Care*. 2022;38(1):e23. doi:10.1017/S0266462322000095 available at: <u>THC_2200009 1..8 (cambridge.org)</u>