Supplementary Materials

Analysis of the Regulatory Science Applied to a Single Portfolio of Eight Biosimilar Product Approvals by Four Key Regulatory Authorities

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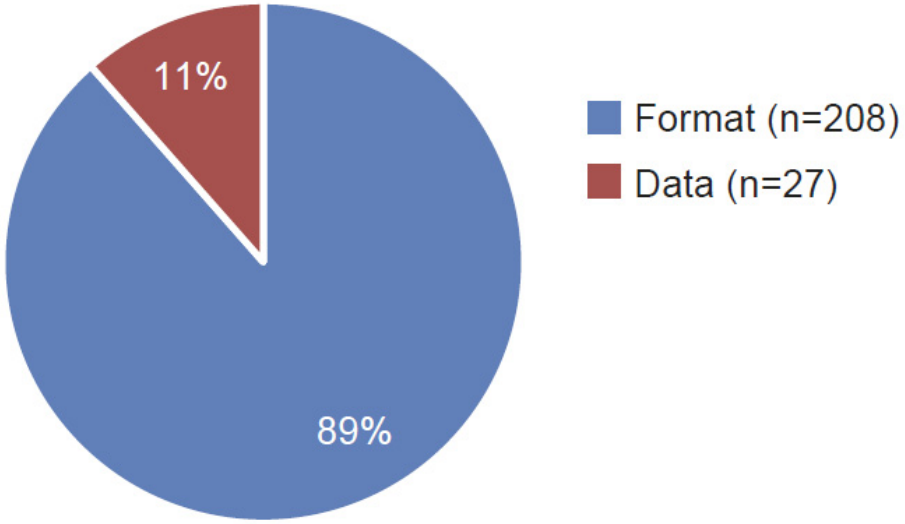
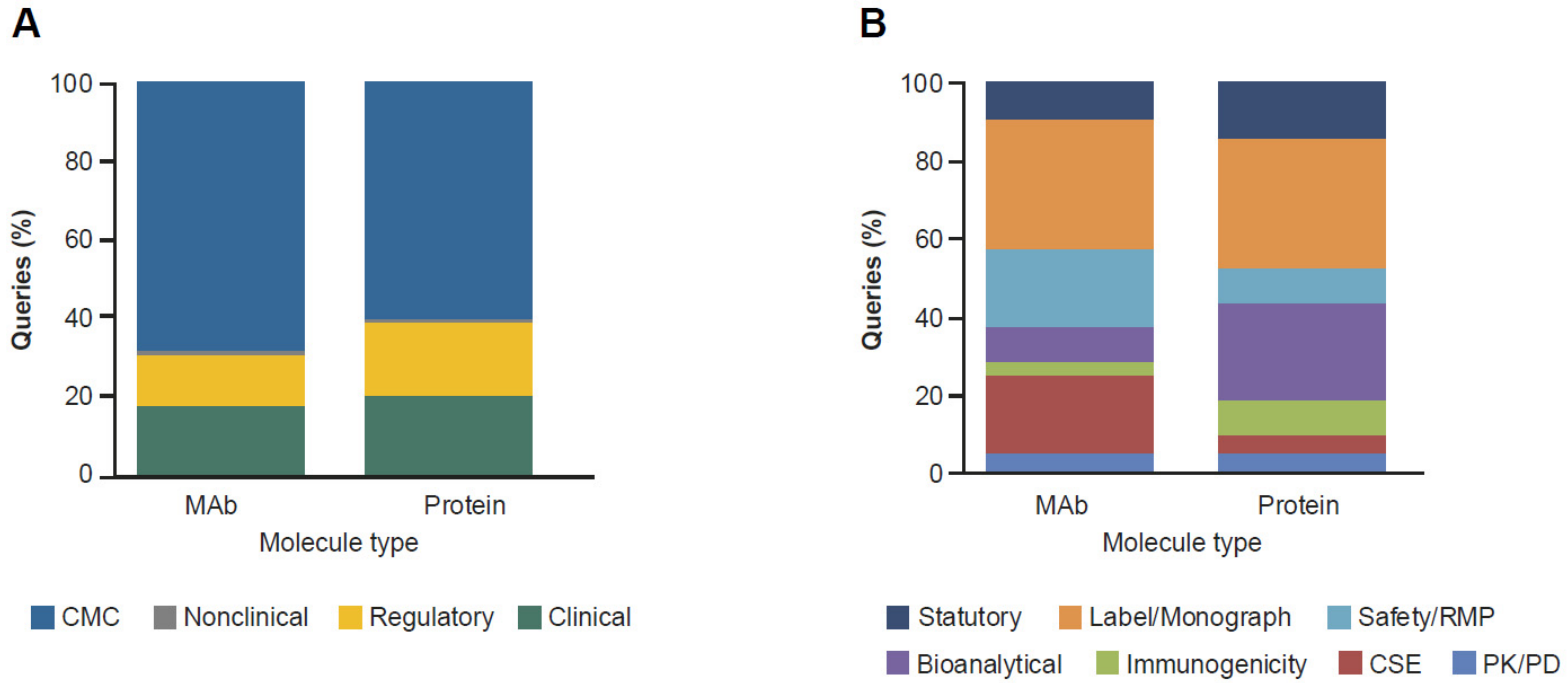
Supplementary Figure S1. Sub-classification of Labeling and Monograph Queries for HC (*n* = 235).



Abbreviations: HC, Health Canada.

Supplementary Figure S2. Major Classification Queries (**A**) and Sub-classification of Regulatory (Including Labeling) and Clinical Queries (**B**) by Molecular Complexity (MAb [*n* = 2811];[a] protein [*n* = 625][b]) for all RAs



Abbreviations: CMC, Chemistry, Manufacturing and Controls; CSE, comparative safety and efficacy; MAb, monoclonal antibody; PK, pharmacokinetic; RA, regulatory authority; RMP, risk-management plan.

[a] PF-adalimumab, PF-bevacizumab, PF-infliximab, PF-rituximab, PF-trastuzumab; [b] PF-epoetin, PF-filgrastim, PF-pegfilgrastim.

Supplementary Table S1. Relationship of therapy area and molecular complexity with major classification, and clinical and regulatory sub-classification**.**

	Variable	Clinical	Regulatory	Nonclinical	CMC				n	χ^2 (df)	*p*-value
Therapy area	Inflammation (n=8)	37	33	1	475				1623	1.12 (3)	.78
	Oncology (n=17)	124	83	2	868						
Molecular type	MAb (n=16)	507	377	3	1924				3436	2.14 (3)	.54
	Protein (n=5)	128	116	1	380						
	Variable	**PK/PD**	**CSE**	**Immunogenicity**	**Bioanalytical**	**Safety/ RMP**	**Label/ Monograph**	**Statutory**	**n**	χ^2 (df)	*p*-value
Therapy area	Inflammation (n=8)	2	13	4	15	3	24	9	277	0.31 (6)	1.0
	Oncology (n=17)	6	43	15	55	5	52	31			
Molecular type	MAb (n=16)	43	175	33	76	180	294	83	1128	12.62 (6)	.049
	Protein (n=5)	12	12	21	61	22	80	36			

Abbreviations: CMC, Chemistry, Manufacturing and Controls; CSE, comparative safety and efficacy; df, degrees of freedom; MAb, monoclonal antibody; PD, pharmacodynamics; PK, pharmacokinetic; RA, regulatory authority; RMP, risk-management plan.