



## Supporting Information

for

### **Computational tools for drawing, building and displaying carbohydrates: a visual guide**

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### **Features of glycan sketchers, builders and viewers**

**Table S1.** Schematic summary of important features of glycan sketchers, builders and viewers.

S.No.	Software Tool	2D sketchers and builders											3D Builders							3D (representation) viewers			
		Sugar Sketcher	LiGraph	Glyco Glyph	Glycan Builder2 SNFG	Sugarbind Glycan Builder	Draw RingS	Draw Glycan SNFG	Glycano	Glyco Editor	Glyco.me Sugar Builder	KegDraw	Polys Glycan Builder	Sweet	CHARMM Gui	Glycam Carbo Builder	do Glycans	Rosetta Carbohydrate	Carb Builder	3D-SNFG	PyMOL	Sweet UnityMol	LiteMol
		1	Available online	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓	
2	Download for local installation	✓		✓	✓			✓	✓			✓				✓	✓	✓	✓	✓	✓	✓	✓
3	Instructions		✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
4	Self-explanatory interface	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓						✓	
5	Image output (file type)	.SVG	.SVG	.SVG	.PNG, .SVG	.PNG .SVG .BMP ...	.PNG (save as)	.JPG (save as)	.PNG .SVG	(screen shot)	.PNG .SVG	.PNG	.SVG		(screen shot)	.GIF (save as)				.BMP	.PNG	.PNG	.PNG
6	SNFG colours	CMYK	CMYK	RGB	RGB		CMYK	RGB		RGB	RGB		CMYK		CMYK				CMYK	RGB		RGB	
7	Oxford linkage geometry	✓			✓	✓	✓	✓	✓		✓		✓										
8	Functionalization	✓		✓	✓	✓		✓	✓	✓		✓			✓	✓	✓	✓			✓		
9	Repeating units [ ]	✓			✓	✓	✓	✓	✓	✓		✓	✓								✓		
10	Linking as glyco-conjugates				✓		✓	✓				✓				✓	✓	✓	✓	✓	✓		✓
11	Text input	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓				✓
12	Option to modify by coding	✓	✓	✓			✓	✓					✓	✓		✓				✓	✓		
13	3D-model visualization												✓	✓	✓	✓				✓	✓		✓
14	3D model output												✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Text/String output (any format)	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓		✓	✓				
16	Glycan library	✓		✓	✓	✓	✓			✓				✓							✓		
17	No. of templates (monosaccharides)	70+	15+	80+	70+	50+	70+	60+	60+	40+	10+	10+	100+	40+	20+	30+			40+				40+