

Supporting Information

Effect of Parylene C on the Corrosion Resistance of Bioresorbable Cardiovascular Stents Made of Magnesium Alloy ‘Original ZM10’

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Table S1. Elemental composition (wt.%) of Original ZM10.

Alloying Elements [wt.%]	Mg	Al	Zn	Zr	Mn	Rare Earth			
						Y	Dy	Nd	Gd
Original ZM10	Balance	–	1.45	0.14	≤0.20	–	–	–	–

Table S2. Specifications of the stent used in this study.

Material	Original ZM10
Strut width (μm)	116~150
Strut thickness (μm)	110
Crossing profile (mm)	1.2–1.3
Drug dose	1.0 μg/mm ² (Sirolimus)

Table S3. Mg ion release (%) from Mg alloy stents after balloon expansion.

Mg ion release [%]	bare	HF	HF/parylene C	HF/polymer	HF/parylene C/polymer
1 month	38.1±4.9	12.8±0.9	0.1±0.01	8.7±1.0	0.2±0.2
2 months	–	38.1±9.7	0.1±0.01	–	–
3 months	–	60.6±7.7	0.2±0.01	–	–
4 months	–	74.1±6.4	0.2±0.01	–	–
5 months	–	77.4±2.4	0.2±0.01	–	–
6 months	–	78.3±0.1	0.2±0.01	–	–

The data represent the mean value for n = 5 with the standard deviations of the means.

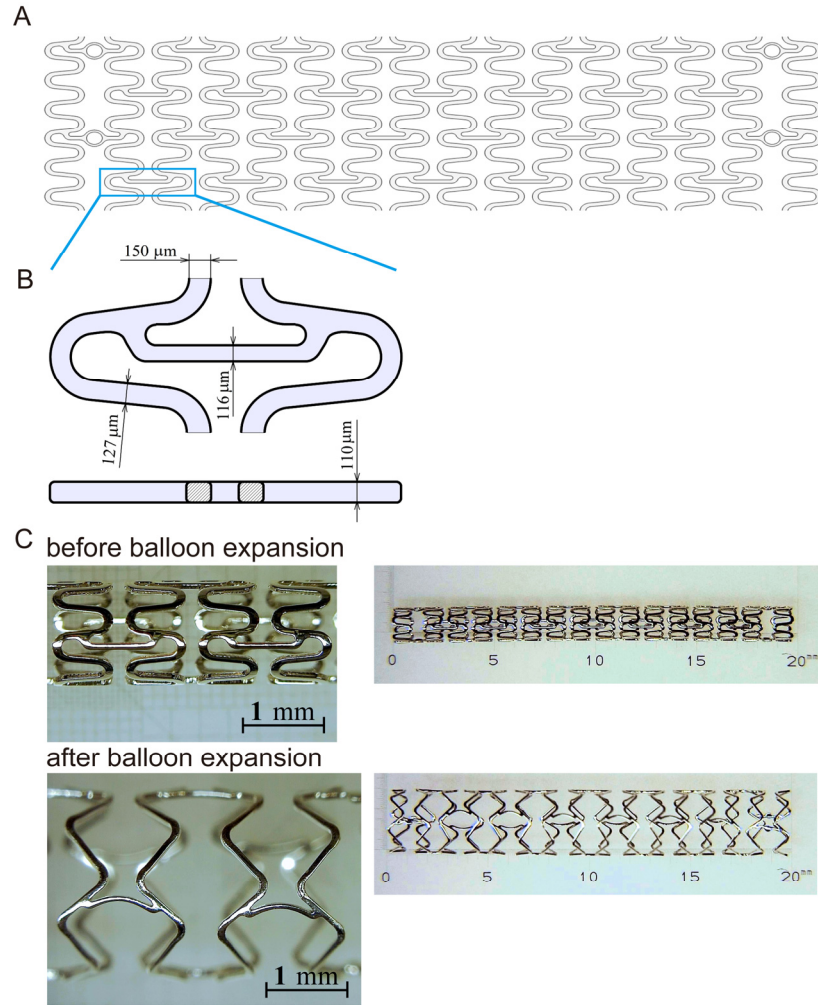


Figure S1. Structure of the Mg alloy stent, 3.0×20 mm with six-crown two-link design and square-shaped struts. (A) Developed structure of the stent. (B) Structure of one unit of the stent. (C) Microscopy images of the stent before (upper) and after (lower) balloon expansion.