

Supplementary Materials: Characterization of a Reservoir-Style Implant for Sustained Release of Tenofovir Alafenamide (TAF) for HIV Pre-Exposure Prophylaxis (PrEP)

Leah M. Johnson *, Sai Archana Krovi, Linying Li, Natalie Girouard, Zach R. Demkovich, Daniel Myers, Ben Creelman and Ariane van der Straten

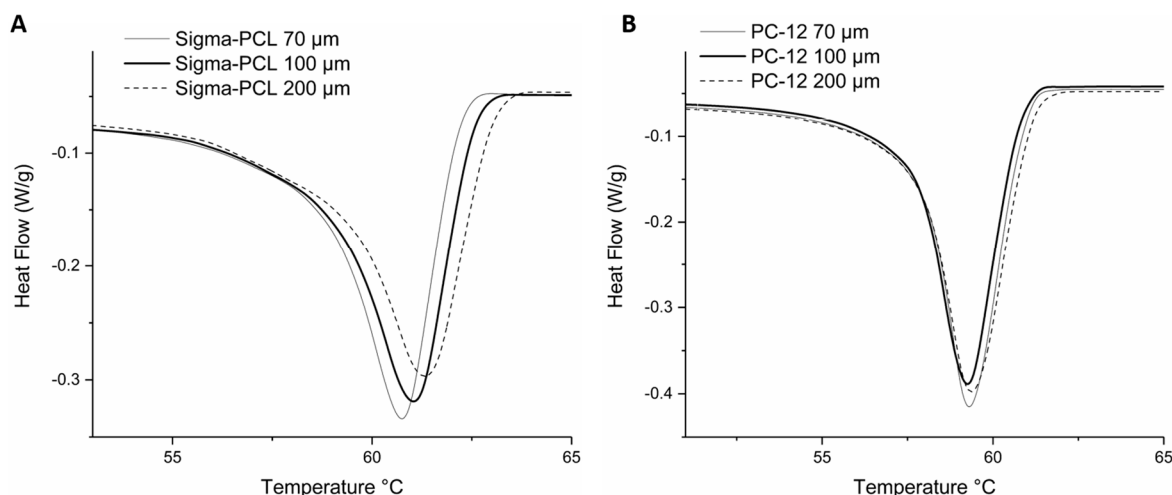


Figure S1. Heat flow versus temperature for extruded tubes comprising (A) Sigma-PCL and (B) PC-12 at different tube thicknesses.

Table S1. Stability of TAF in implants at different timepoints within in vitro conditions *.

Days	% Stability
90	97.1 ± 0.09
120	96.5 ± 0.17
15	92.5 ± 0.53
180	89.2 ± 0.84

* Implants comprise Sigma-PCL of 100 µm wall thickness, 2.5 mm OD, and 40 mm length containing a 2:1 TAF-Castor Oil formulation. Implants were not gamma-irradiated.

Table S2. GPC Analysis of PCL.

Type of PCL		Sigma-PCL	PC-12
PCL raw material without gamma irradiation	M_n (kDa)	103	51
	M_w (kDa)	148	89
PCL extruded tubes * without gamma irradiation	M_n (kDa)	98	52
	M_w (kDa)	145	88
PCL extruded tubes * after gamma irradiation	M_n (kDa)	70	41
	M_w (kDa)	119	77

* Wall thickness of PCL tubes of 70 µm