

## Supporting Information

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**Bacteriophobic Zwitterionic/Dopamine Coatings for  
Medical Elastomers**

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García-Bonillo, Darío Pérez, Shuo Zhang, Salvador  
Borrós, and Abdon Pena-Francesch\**

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**Contents:**

**Figure S1:** FTIR spectra of the multilayer structure at each step of layer deposition, including controls.

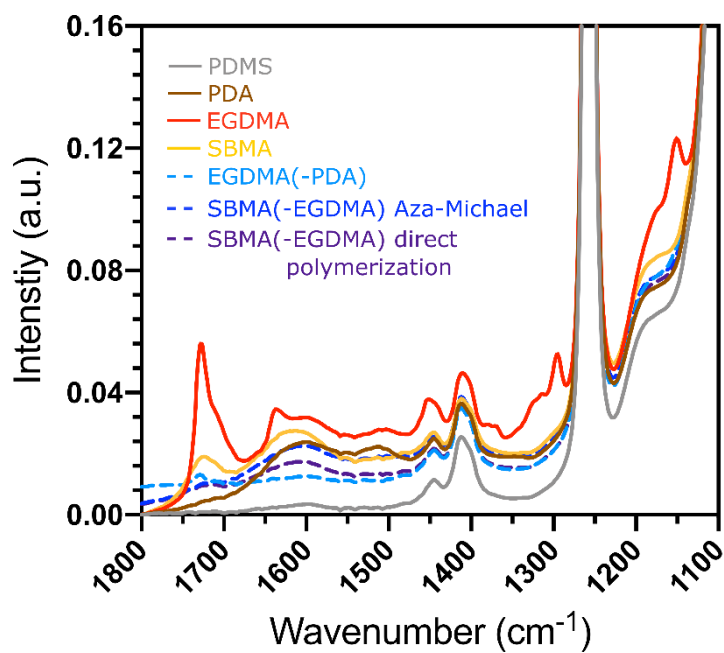
**Figure S2:** Loading and unloading profiles in mechanical stability tests.

**Figure S3.** WCA of ZW-coated PDMS under torque stress

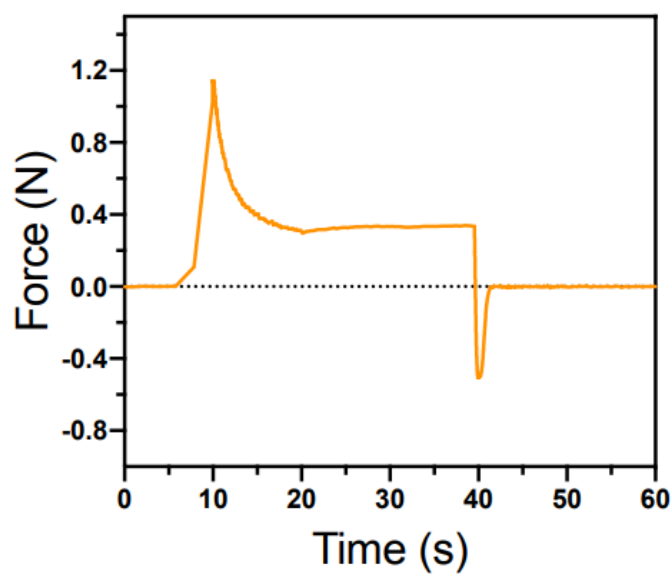
**Figure S4:** Mechanical stability of the zwitterionic coatings under clamping, abrasion, and peeling stress

**Movie S1:** Biofilm mucus adhesion.

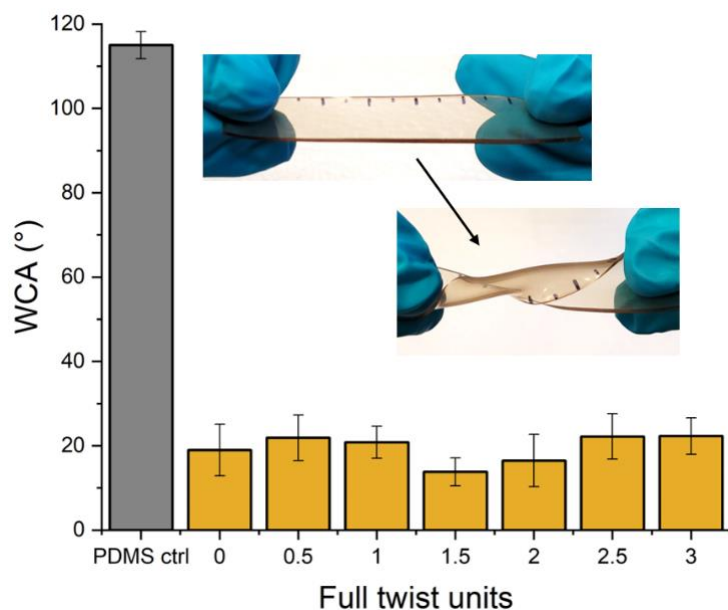
**Movie S2:** Surface functionalization of urinary catheters.



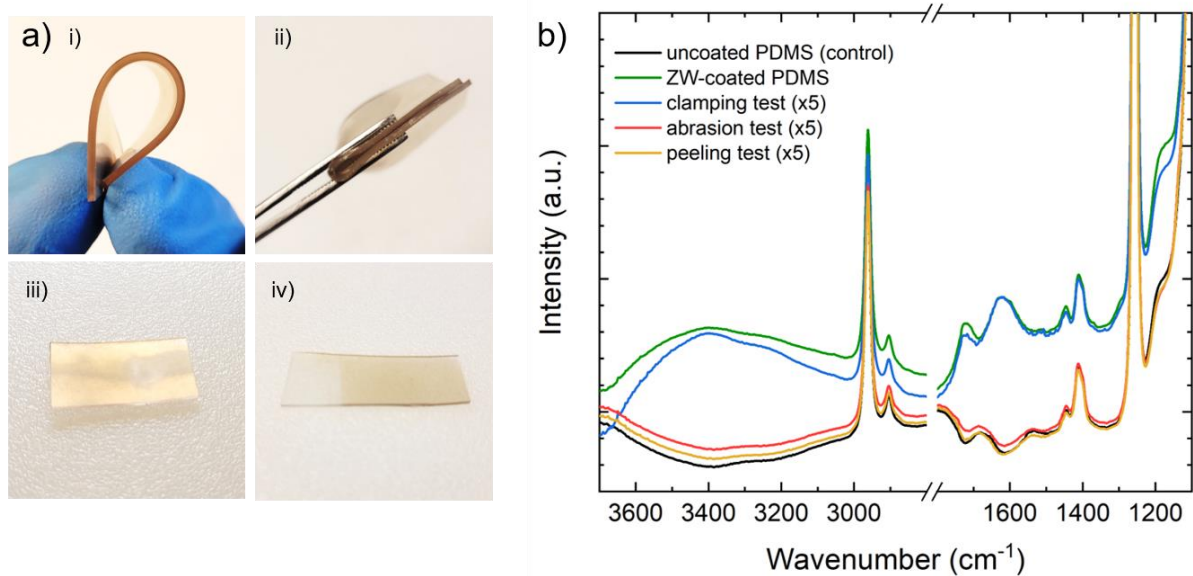
**Figure S1.** FTIR spectra of the multilayer structure at each step of layer deposition, including controls.



**Figure S2.** Loading and unloading profiles in mechanical stability tests.



**Figure S3.** WCA of ZW-coated PDMS under torque stress.



**Figure S4.** Mechanical stability of the zwitterionic coatings under clamping, abrasion, and peeling stress. **a)** Different types of mechanical stress applied to ZW-coated PDMS strips, showing: i) bending, ii) clamping, iii) abrasion, and iv) peeling. **b)** TIR spectra of PDMS, ZW-coated PDMS, and ZW-coated PDMS after clamping, abrasion, and peeling damage.