

## Electronic Supplementary Information

### **Poly(amidoamine) dendrimers grafted on electrospun poly(acrylic acid)/poly(vinyl alcohol) membranes for host-guest encapsulation of the antioxidant thymol**

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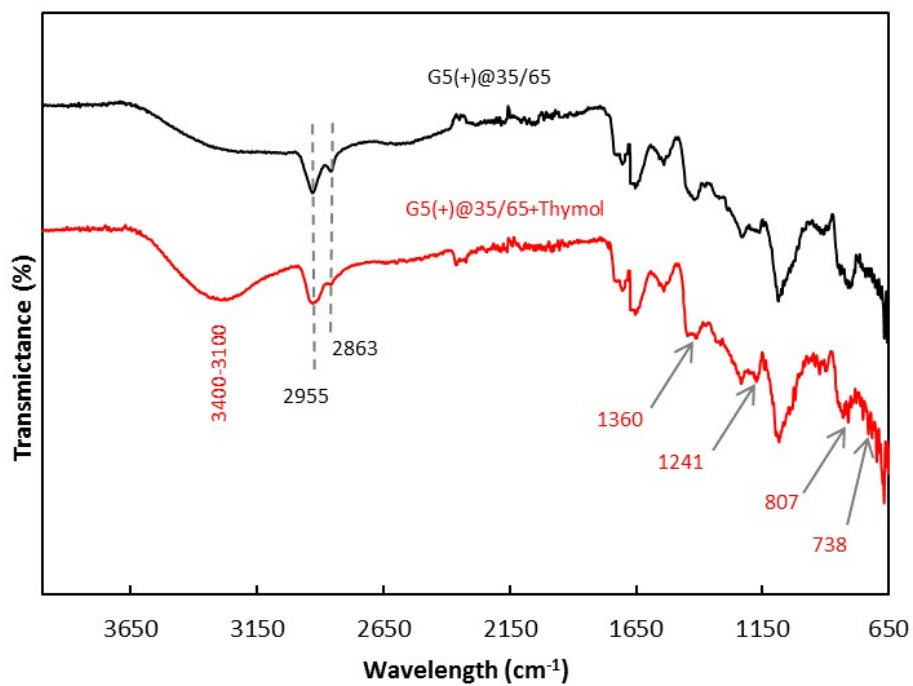
**Figure S1:** FTIR spectra of 35/65 PAMAM G5-NH<sub>2</sub>-functionalized membranes before and after thymol loading.

**Figure S2.** SEM images of PAMAM G5-NH<sub>2</sub>-functionalized membranes before (A1-D1) and after (A2-D2) thymol loading.

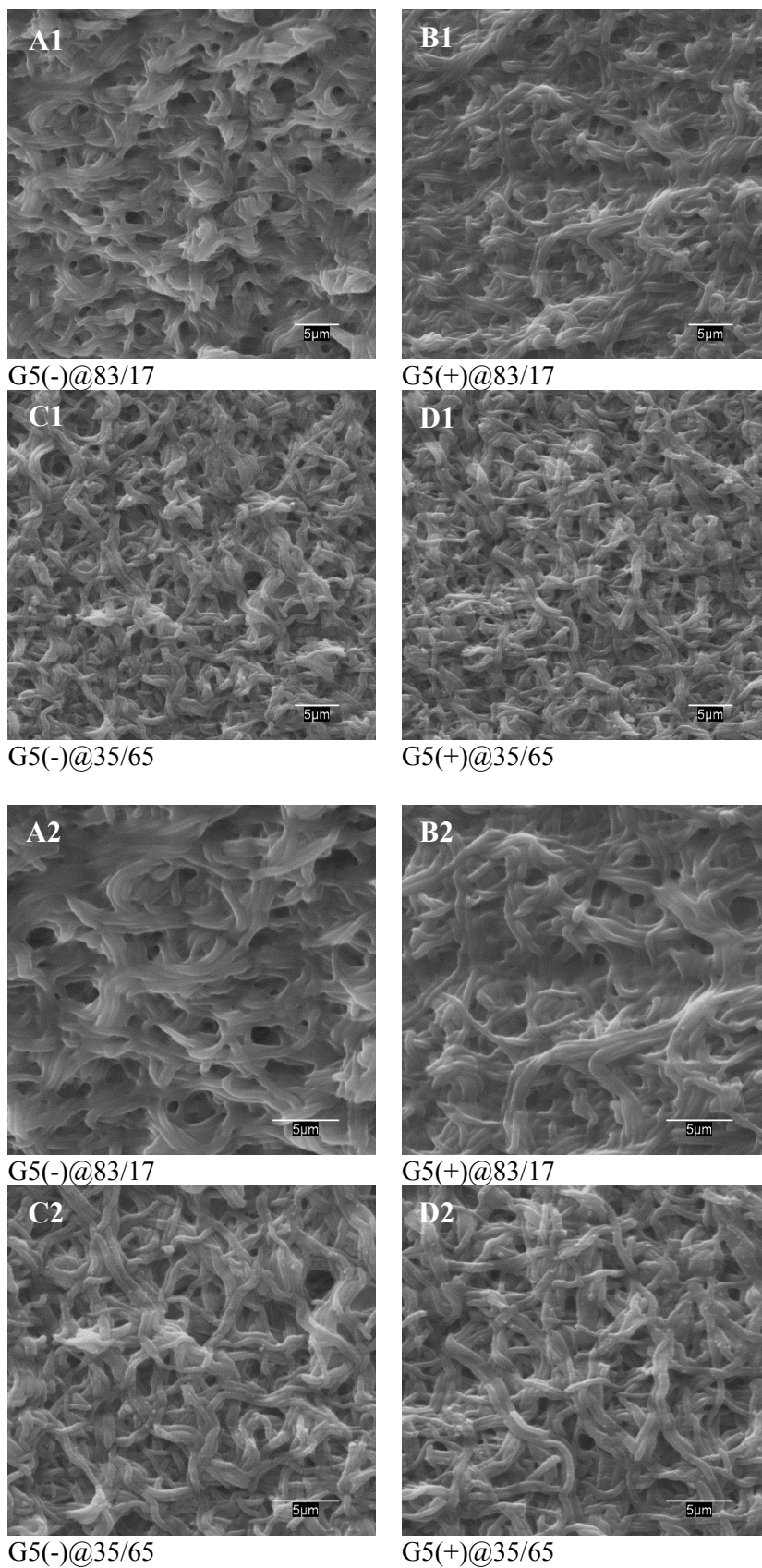
**Figure S3.** Thymol loading capacity of PAMAM G5-NH<sub>2</sub> functionalized membranes after four consecutive charges.

**Figure S4.** Surfaces of thymol molecules (blue) encapsulated in PAMAM-G5 dendrimer (pink).

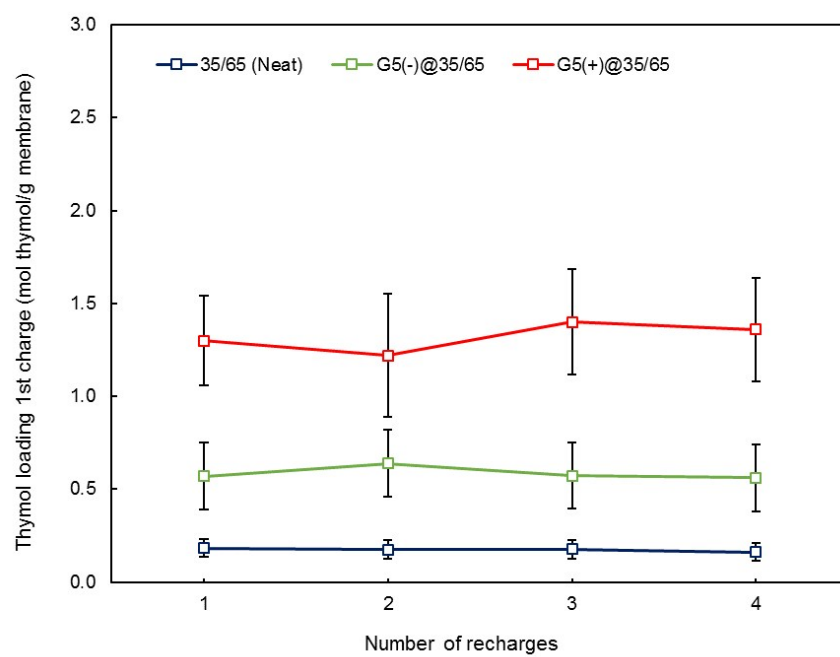
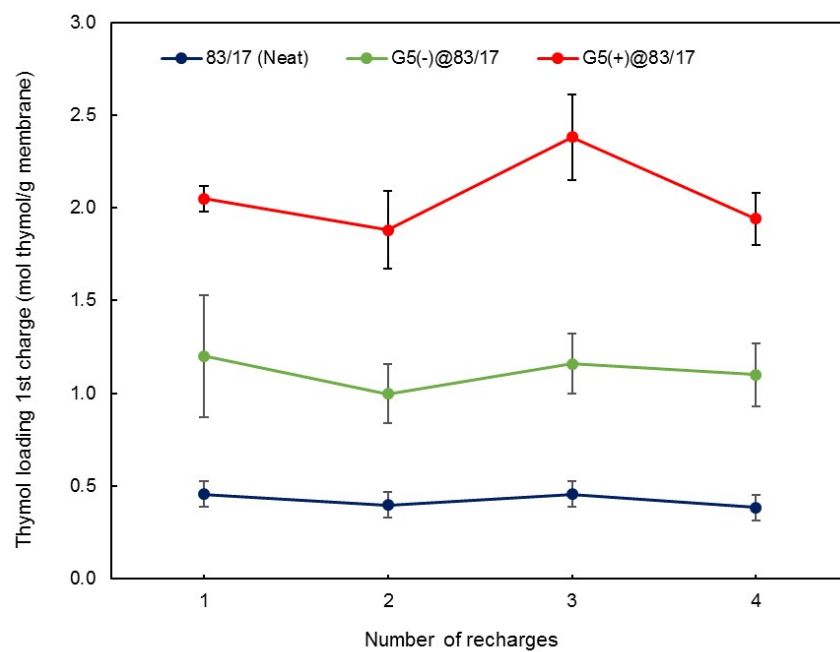
**Figure S5.** Thymol molecules associated to the G5 dendrimer. The dendrimer centre is shown in sticks and coloured by element. Four thymol molecules coloured in red, turquoise, blue, and light green locate near the dendrimer centre. The other (12) thymol molecules locate in the mid- and outer-regions of the dendrimer.



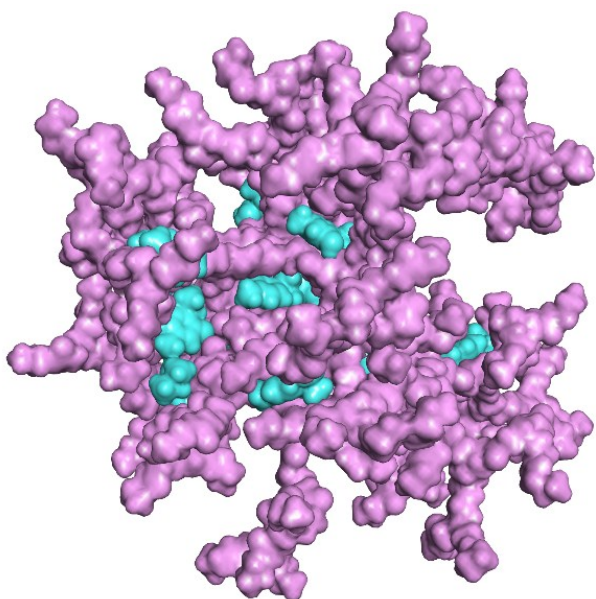
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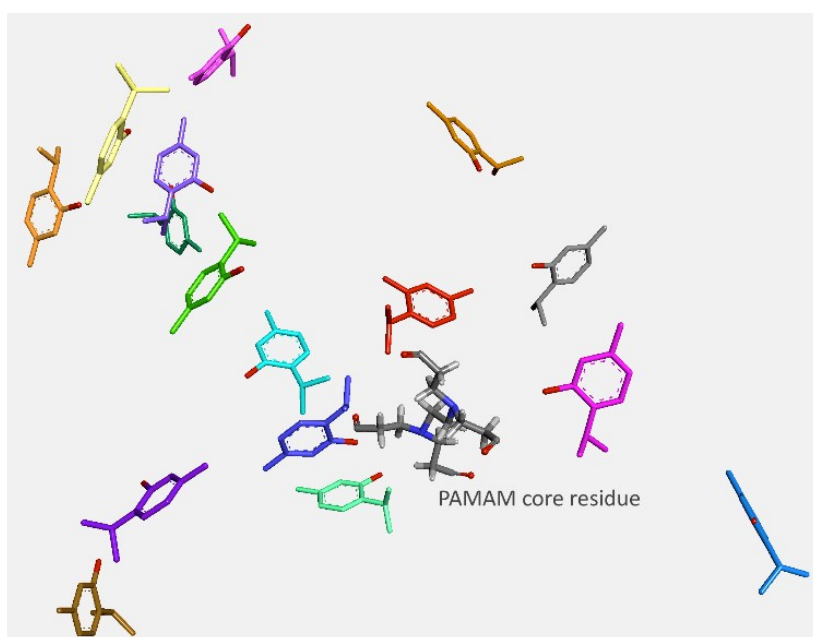
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