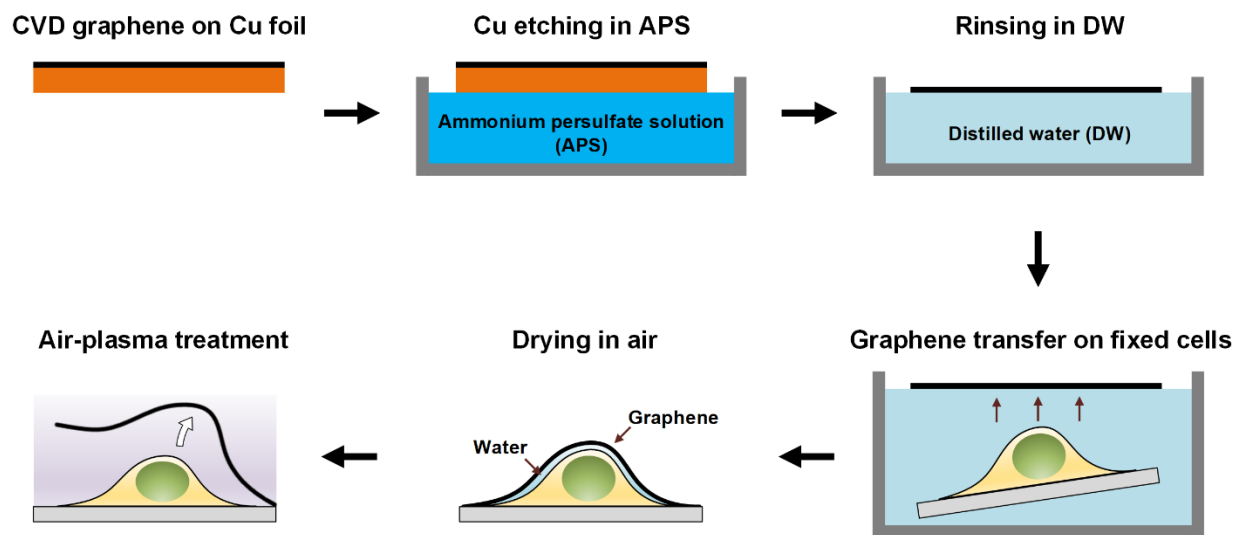


**Supplementary Online Information for**

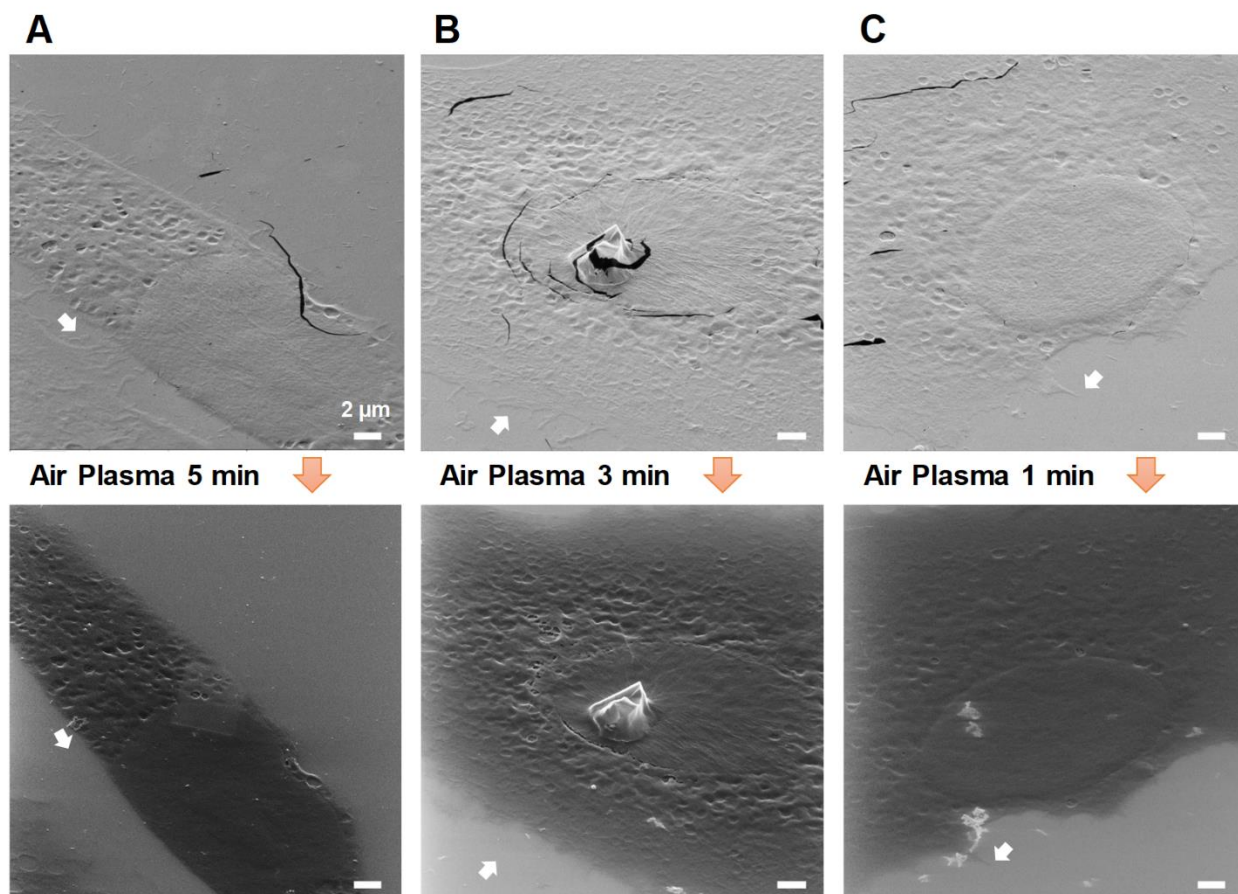
**Preparation of cellular samples using graphene cover and air-  
plasma treatment for time-of-flight secondary ion mass  
spectrometry imaging**

Heejin Lim, Sun Young Lee, Dae Won Moon\*, and Jae Young Kim\*

## Supplementary Figures



**Figure S1.** Entire process for graphene transfer on cells and air-plasma treatment.



**Figure S2.** Effects of air-plasma treatment on graphene-covered cells. A-C, HIM images of graphene-covered fixed A549 cells before (upper) and after air-plasma treatment (lower) for 5 min (A), 3 min (B), and 1 min (C). Treatment of air-plasma over 1 min can not only remove graphene, but also damage cellular membrane. White arrows (A, B) show some part of cellular leading edges were etched away by air-plasma. In contrast, 1-min air-plasma treatment is sufficient to completely remove graphene without noticeable damage. Scale bar, 2  $\mu\text{m}$  (A-C).