Supplementary Information

A.
$$HN \longrightarrow OH$$
 $N \longrightarrow N$ $N \longrightarrow N$ NH_2 $HN \longrightarrow N$ NH_2 NH_2

B.
$$H_{3}CO \left\{ \begin{array}{c} O \\ \\ \end{array} \right\}_{113} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\ \end{array} \begin{array}{c} O \\ \\ \end{array} \begin{array}{c} O \\$$

Figure S1. A. the chemical structures of C14-PEI; and B. PEG-PLE.

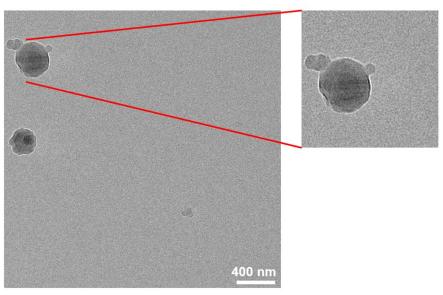


Figure S2. Cryo-EM image of C14-PEI nanoparticles.

Uncovered Area (Pixels)	0h			4h			8h			24h		
Blank	1312919	1309065	1301590	918533	857203	903438	598260	642215	466384	0	0	0
C14-PEI	1273331	1278102	1261105	822393	834535	816370	576807	553308	557377	0	0	4892
PEG-PLE/C14-PEI w/w 0.2	1467265	1165410	1168270	1162051	909283	930458	944096	761768	803898	251631	139939	293141
PEG-PLE/C14-PEI w/w 0.5	1135381	1170014	1116487	917249	899919	875391	794744	701866	708277	65434	111302	27251

Table S1. The uncovered area in cell migration tests.