## Supplementary Material S1

Chemical characterization of the three individual human milk samples (A, B and C) and also of the skimmed human milk pool used for the treatment of the cells has been performed by spectrophotometry using a MilkoScan FT 6000 (FOSS). We have also quantified the bacterial load by obtaining DNA from those samples and performing specific Q-PCR for 16S rDNA amplification.

sample	Fat (%w/w)	Protein (%w/w)	Lactose (%w/w)	non fatty solids (%w/w)	Bacterial Load (copies 16S rDNA/mL)
А	3.14	1.88	7.08	9.64	2.45x10 <sup>7</sup>
В	2.92	1.86	6.98	9.58	1.31x10 <sup>6</sup>
С	3.48	1.52	7.34	9.44	0.84x10 <sup>6</sup>
skimmed pool ABC	0.58	1.72	7.62	9.62	1x10 <sup>7</sup>