Correction: The first synthesis of N-acetyleneuraminic acid 1,7-lactone

Raffaele Colombo, Mario Anastasia, Paola Rota and Pietro Allevi*

Correction for 'The first synthesis of N-acetyleneuraminic acid 1,7-lactone' by Raffaele Colombo et al., Chem. Commun., 2008, 5517–5519.

A new protocol has been prepared to address issues relating to the required excess of benzyloxycarbonyl chloride (CbzCl) in the synthesis of the desired 1,7-lactones. This results in the following changes:

The first footnote to the manuscript should read as follows:

"‡Sialic acid 1 (900 mg, 2.91 mmol), dissolved in DMF (10 mL) at 60 °C, under stirring, was cooled at 0 °C and diluted with THF (8 mL). Then CbzCl (1.04 mL; 7.28 mmol, 2.5 eq.) in THF (4 mL) was added in a single portion, followed by Et₃N (1.20 mL; 8.73 mmol, in a single addition). The mixture was then stirred for 30 min at 23 °C. After this, methanol (2 mL) was added dropwise and the stirring was continued for 15 min. Evaporation of the solvent under reduced pressure (22 mmHg and then at 10⁻¹ mmHg) afforded a crude residue, which, after purification by flash chromatography (eluting with AcOEt/MeOH, 9 : 1, v:v), afforded the pure Neu5Ac 1,7-lactone 6 (1.01 g; 82%) as a white solid: mp 122–124 °C."

The other physico-chemical properties are identical to those reported in the paper.

In addition, Section (v) of the ESI should read as follows:

"(v) Preparation of the 2-methoxy N-acetyleneuraminic acid 1,7-lactone 9

The 2-methoxy N-acetyleneuraminic acid 8 (92 mg, 0.29 mmol), dissolved in DMF (1 mL) at 60 °C, under stirring, was cooled to 0 °C and diluted with THF (0.8 mL). Then CbzCl (0.10 mL; 0.72 mmol, 2.5 eq.) in THF (1 mL) was added in a single portion, followed by Et₃N (0.12 mL). The mixture was then stirred for 30 min at 23 °C. After this, methanol (0.2 mL) was added and the stirring was continued for 15 min. Evaporation of the solvent under reduced pressure (22 mmHg and then at 10⁻¹ mmHg) afforded a crude residue, which, after purification by flash chromatography (eluting with AcOEt/MeOH, 9 : 1, v:v), afforded the pure 2-methoxy Neu5Ac 1,7-lactone 9 (66 mg; 75%) as a white glass."

The other physico-chemical properties are identical to those reported in the paper.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.