CORRIGENDUM

Design and synthesis of boronic-acid-labeled thymidine triphosphate for incorporation into DNA

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The authors wish to apologize for the omission of the seminal work by Nobel Laureate, Professor K.B. Sharpless in starting the 'click chemistry' field. This work should have been cited in the second paragraph of the Results and Discussion section; the corrected complete paragraph is given as follows. The full reference details for this work are given after the paragraph.

For minimal interference of the polymerase reaction, we were interested in a long and somewhat linear linker, and for the ease of attachment we were interested in using a reaction that is mild, can be carried out in an aqueous solution, and does not interfere with other existing functional groups. For these reasons, we selected the Huisgen cycloaddition, which has seen much broadened applications recently due to the work of the Sharpless lab in starting the field of 'click chemistry', for the coupling of the boronic acid moiety with the nucleoside (35). Therefore, we have designed compound 12 as a monomeric building block for DNA polymerization. We chose an 8-quinoline boronic acid analog because of our prior experience with such compounds, its known affinity for various sugars, and its water solubility. In addition, we were interested in using this somewhat large arylboronic acid as a model because its successful incorporation into DNA would probably mean that other smaller arylboronic acid analogs would have minimal problem to be incorporated.

Sharpless, K.B., Manestch, R. (2006) In situ Click Chemistry: a powerful means for lead discovery. *Expert Opin. Drug Discov.* 1, 525–538.