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## Hybrid Capture

To the Editor:

Readers of *Clinical Chemistry* may be interested in an alternative view from that offered in the recent review, "Molecular diagnostics of infectious diseases" by Tang et al. (1). I specifically refer to the dismissal of Digene's Hybrid Capture<sup>®</sup> test as of "limited utility owing to poor sensitivity".

Hybrid Capture was classified as "nucleic acid analysis without amplification". In fact, Hybrid Capture is a quantitative nucleic acid test that uses an efficient signal amplification strategy with a chemiluminescent readout. The second generation Hybrid Capture II test, launched in the summer of 1997, has a detection limit one-fifth to one-tenth that of branched DNA, as measured by cut-off analyses with carefully calibrated clinical specimen dilution series. This latter commercial test was given its own DNA signal amplification paragraph in the review by Tang et al. (1).

There are nearly 50 recent papers in the last two years alone that demonstrate the value of Hybrid Capture to detect targets such as cytomegalovirus (2), human papillomavirus (3), and herpesvirus (4).

Interested readers may peruse these selected peer-reviewed papers or contact me to obtain a full list of references.

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*Two of the authors respond to the  
 Scientific Director of Digene  
 Corporation:*

To the Editor:

The letter by Dr. Lörcincz states that we somehow implied that the Digene product itself lacks sensitivity. The section referred to is a paragraph on page 2024, in which we collectively describe conventional nucleic acid probe techniques as being of "limited utility owing to poor sensitivity". We stand by this statement. Signal-amplified probe techniques such as Hybrid Capture and branched DNA still require relatively large numbers of targets to be present in the clinical sample, as is the case for human papillomavirus. For most organisms, including human papillomavirus, substantially higher sensitivity can be attained by

using target amplification methods. Many publications have described these sensitivity differences (1–7). Whether these differences are clinically significant is another matter. Nevertheless, the reason a Hybrid Capture test for, say, HIV RNA is not commercially available is most likely related to its lower sensitivity.

The reference to modification of the Hybrid Capture System II is interesting; once data on the system are published, the data may need to be cited in future articles.

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