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## Press Release

### RESULTS OF CLINICAL ARRAYCGH ARE MADE EASIER TO INTERPRET AND REPORT

*BlueGnome CytoChip™ updated with known Copy Number Variations*

On 26th November 2006 Redon et al published in Nature the largest study yet undertaken into global copy number variation in the human population (1). 1447 copy number variable regions were identified in 270 DNA samples taken from normal individuals from 4 different ethnic populations.

With an average of 70 such copy number variations detected when comparing two genomes at a resolution of 100Kb the ability to rapidly identify such polymorphisms remains a major barrier to the cost effective clinical application of arrayCGH, where clinicians are ultimately only interested in those regions of copy number imbalance which might be associated with an underlying genetic disorder.

Following rapidly upon the publication of the Nature paper BlueGnome today announced that all 3600 of the BAC clones on their v1.1 CytoChip have been validated against the results published by Redon et al, a task much simplified by the fact that both the CytoChip and the Redon WGTP array used in the study use the same RP clone library.

The impact in the clinic has been immediate and dramatic. Dr Elena Kolomietz, Deputy Director of the CytoGenetics Laboratory at the Mount Sinai Hospital Toronto commented, 'In a clinical laboratory every region of copy number imbalance has to be followed up, reported and its potential impact explained. The very low number of false positives returned by the CytoChip was one of the key reasons why we selected it for use in our laboratory. Incorporating the information from the Redon study enables us to identify and explain results arising from normal copy number variation. We are therefore able to report our findings more rapidly, more cost effectively and with greater confidence than before.'

Dr Nick Haan, Founder and CEO of BlueGnome added, 'The CytoChip delivers resolution where it is required; a 1Mb backbone combined with full tiling on those regions that are well understood and known to be of clinical interest. This focused approach avoids the majority of the natural variation in the human genome. By incorporating the results of the Redon Nature Paper into the annotation of the CytoChip, and by using this in the visualization and reporting of the results, we have been able to significantly reduce the amount of follow ups and hence the total cost of each arrayCGH investigation.'

(1) Redon et al, Nature Vol 444, November 2006

#### About BlueGnome

BlueGnome ([www.cambridgebluegnome.com](http://www.cambridgebluegnome.com)) is a specialist developer of software and consumables for the clinical application of arrayCGH. BlueGnome's CytoChip, a high quality BAC microarray, has been developed in collaboration with leading laboratories of the UK NHS to support the investigation of 74 known genetic conditions and screening of the genome at a 1Mb resolution in a single, dye swap experiment. For more information see [www.cytochip.com](http://www.cytochip.com).

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