



Summary of the MAQC July-28-2005 Teleconference

The MAQC Project: Calibrated RNA Samples, Reference Datasets, and QC Metrics/Thresholds for Microarray Quality Control

Teleconference Date: July 28, 2005 (9 am PDT / 11 am CDT / 12 pm EDT / 16:00 GMT)

Summary Date: August 4, 2005

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MAQC URL: <http://edkb.fda.gov/MAQC/>

- RNA Samples:** Bob Setterquist stated that high quality brain RNA sample had been made and would become available for the MAQC main study by August 10, 2005. On the same day, Ambion will launch the brain RNA as a commercial product.
- Main Study and Protocols:** Five replicates per sample with independent amplification/labeling reactions will be conducted for the MAQC main study. Quality control parameters for individual steps should be submitted along with microarray data. Microarray manufacturers are encouraged to submit their protocols that will be posted at the MAQC web site.
- Test Sites:** The “official” MAQC test sites are (as of July-28-2005):

| | Manufacturer (Site 1) | Site 2 | Site 3 |
|----|------------------------------|-----------------|-------------------|
| 1 | Affymetrix* | FDA/CDER | Ambion |
| 2 | Agilent | FDA/NCTR | Icoria |
| 3 | Applied Biosystems | EPA/NHEERL | Vanderbilt Univ. |
| 4 | Combimatrix | UCSF | Stanford |
| 5 | Eppendorf | MD Anderson | CSHL |
| 6 | GE Healthcare | UMass Boston | Genus Biosciences |
| 7 | Illumina | Duke University | Burnham Institute |
| 8 | NCI (Custom arrays) | FDA/NCTR | FDA/CBER |
| 9 | AB (TaqMan) | N/A | N/A |
| 10 | Genospectra (QuantiGene) | N/A | N/A |

*Three additional sites (EPA, Novartis, and UCLA/Cedars-Sinai) will test the four RNA samples with Affymetrix platform and submit the datasets to MAQC. Ambion and Stratagene will provide RNA samples to all 29 test sites.

- Titration Pilot:** PowerPoint presentations from Combimatrix and Genospectra were shared among the Titration Pilot team.
- Sequence-based Mapping:** The Sequence Mapping group met in Rockville, MD on July 19, 2005, and the group’s decision of working on the perfect matches to RefSeq’s at first was discussed in a teleconference on July 26 with representatives from microarray manufacturers. The group will share its results with manufacturers during the week of August 1.
- No Additional Test Site for QRT-PCR:** Kathy Lee (AB) stated that QRT-PCR (TaqMan) assays would not be run at additional site due the cost.

7. **Understanding of Participation in the MAQC Project:** Paul Wolber suggested that what people have agreed upon while participating in the MAQC project be put in written. A **guidance document for the MAQC main study** has been drafted by Mike Wilson (Ambion) and under revision, and will be distributed to the MAQC group for comments before the shipment of RNA samples to test sites.
8. **MAQC Face-to-Face Meeting:** The next MAQC face-to-face meeting will be held on **December 1-2, 2005** in Palo Alto, CA. Please mark your calendar!

Timeline/Milestones:

- **August 31, 2005:** Completion of MAQC main study (data generation)
- **December 1-2, 2005:** Face-to-face meeting at Palo Alto, CA
- **February 11, 2006:** Submission of manuscript(s); Release of MAQC datasets
- **October/November 2006:** Public meeting on microarray quality control and data analysis at FDA/NCTR or FDA/CDER
- **December 2007:** (FDA) Guidance on microarray quality control and data analysis

The next MAQC Teleconference:

Thursday, August 11, 2005 (9 am PDT / 11 am CDT / 12 pm EDT / 16:00 GMT)

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