

AFDT

Proficiency Testing Program Report

Prepared by Dod Stewart
Reviewed by Jean Heneghan

AFDT Proficiency Testing Results – November 5, 2007

SUMMARY REPORT Cell Sendout:

The November 2007 AFDT (American Foundation for Donation and Transplantation) (former SEOPF) Proficiency Testing challenges were graciously sent out by Dr. Deborah Crowe and her DCI Laboratories staff in Nashville, Tennessee. AFDT Proficiency Testing sends out 5 anti-coagulated whole blood samples per challenge. AFDT Proficiency Testing (AFDT-PT) will, as closely as possible, send proficiency testing (PT) samples that most represent actual patient samples that are received by labs for clinical testing. Federal regulations require that all PT samples must be handled and tested exactly like those clinical samples that are received in each laboratory on a routine basis. This will more accurately assess and predict how a clinical Histocompatibility lab functions on a day-to-day basis. We feel that these AFDT Proficiency Testing Samples meet all mandates and guidelines. The results obtained and graded are therefore more relevant and indicative of actual clinical situations and thereby in keeping with the intent of CLIA, UNOS, ASHI and CAP standards. Labs may test by any methods employed and report results as they would normally do on a clinical report.

As a reminder, there were some modifications in the grading criteria in 2006, which still apply in 2007. For a detailed set of instructions and current policies, please refer to the AFDT/SEOPF web site (www.seopf.org). Results are now graded and the definition of consensus changed in 2006 from 85% to 80%. **Consensus** is now reached when 80% or more of the labs report a particular result. Results reported by 50% of the labs will be considered as the **majority** of the labs. All reported antigens and alleles will be graded if a sufficient number of labs (8) respond. In accordance with CLIA requirements, each cell with **counted as a miss if any consensus antigen is incorrect**. Antigen level results should be the cumulative response and final answer a lab would report based on serological or molecular results or a combination of any methods, using appropriate UNOS equivalents (www.unos.org).

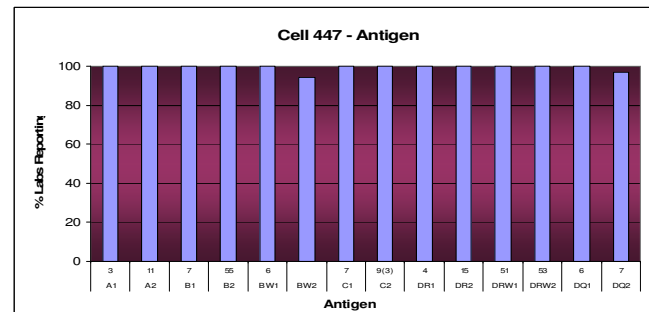
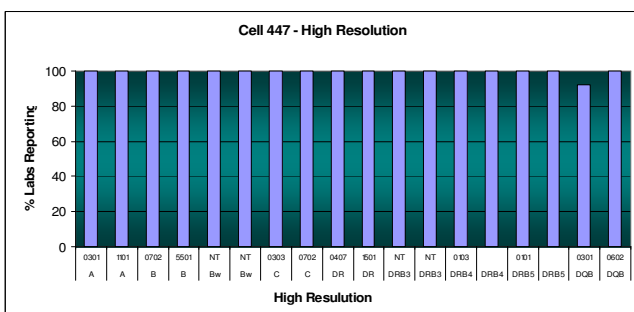
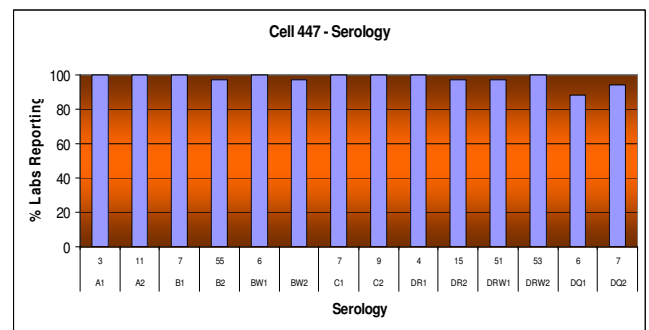
AFDT will **grade** any methods entered in to the data fields. If a lab does not want any particular data field be graded, **NT** must be entered into that field, in order to be excluded. Labs must contact their accrediting agencies, (ASHI, CAP, UNOS, NMDP) etc to determine what loci and alleles need to be submitted for grading. AFDT is currently working on a major revision to the data entry, analysis and grading rules.

Labs are strongly encouraged to submit high resolution results as well. Only allele level high resolution results can be submitted. (For example B3501 is an acceptable result but B3501/07/23 is not). Any submitted results entered in a field, will be graded. Please be careful to submit only properly formatted results, since they will be graded. Consensus antigens and alleles are bolded. Alleles reported by the majority of the labs are designated with a ().

Faxed results are no longer acceptable and electronic data entry is required. Please contact AFDT if there are any problems with data submissions. All communication will be done electronically so please carefully watch for any announcements from AFDT regarding changes and send out information from AFDT Proficiency Testing Committee. Paper copies of reports will no longer be sent to labs, either.

The report below is a complete summary of the November 5, 2007 results. Note that each cell is presented separately and the methods displayed in charts and graphs that will describe the antigens and alleles that were reported. Each lab can compare their results with those of other labs that participated in this exchange.

CELL 447 – Caucasian

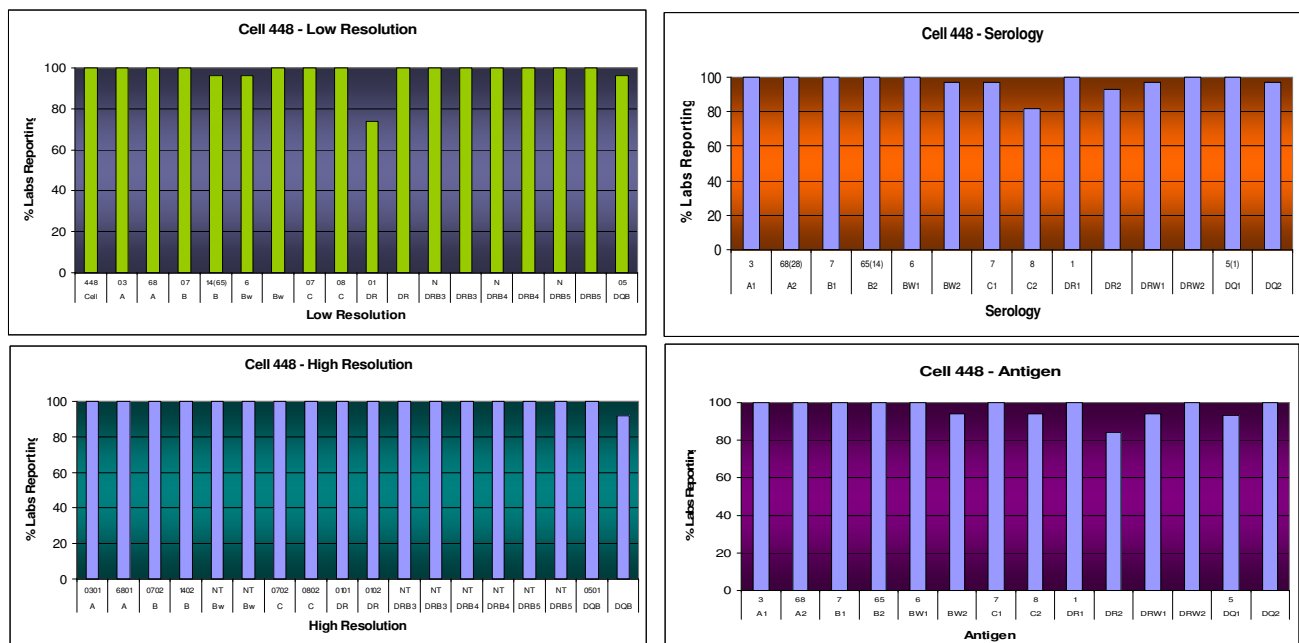


CELL 447 (Caucasian) Antigen Level: **HLA: A3, A11; B7, B55, (Bw6); Cw7, Cw9 (Cw3); DR4, DR15; DR51, DR53; DQ6, DQ7**

CELL 447 (Caucasian) High Resolution: **HLA: A*0301, A*1101; B*0702, B*5501, Cw*0303, Cw*0702; DRB1*0407, DRB1*1501; DRB5*0101 ; DQB1*0301, DQB1*0602**

Cell 447 is from a Caucasian donor. All alleles met consensus in this cell by serology, low resolution, antigen level and high resolution methods.

Cell 448 – Caucasian

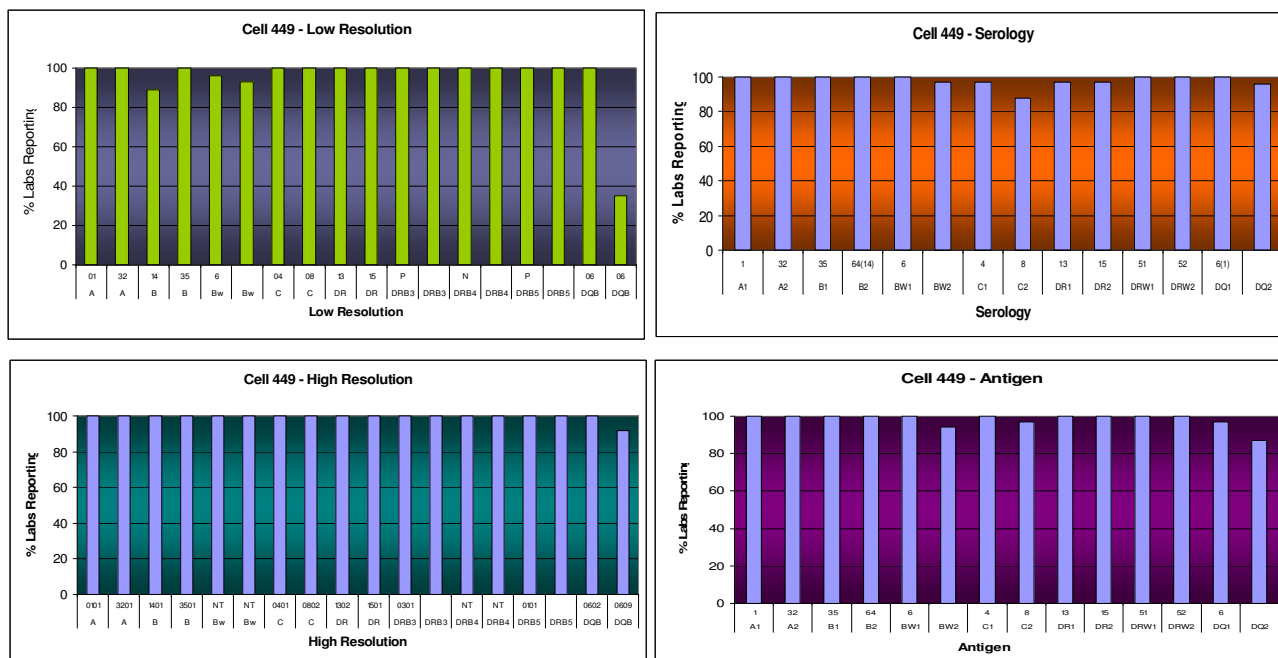


CELL 448 (Caucasian) Antigen Level: **HLA: A3, A68; B7, B65, (Bw6); Cw7, Cw8; DR1, DR-; DQ5, DQ-**

CELL 448 High Resolution: **HLA: A*0301, A*6801; B*0702, B*1402; Cw*0702, Cw*0802; DRB1*0101, DRB1*0102; DQB1*0501**

This cell is also from a Caucasian donor, also reached consensus for Class 1 and Class 2 antigens, by all methods for all alleles.

Cell 449 – Caucasian

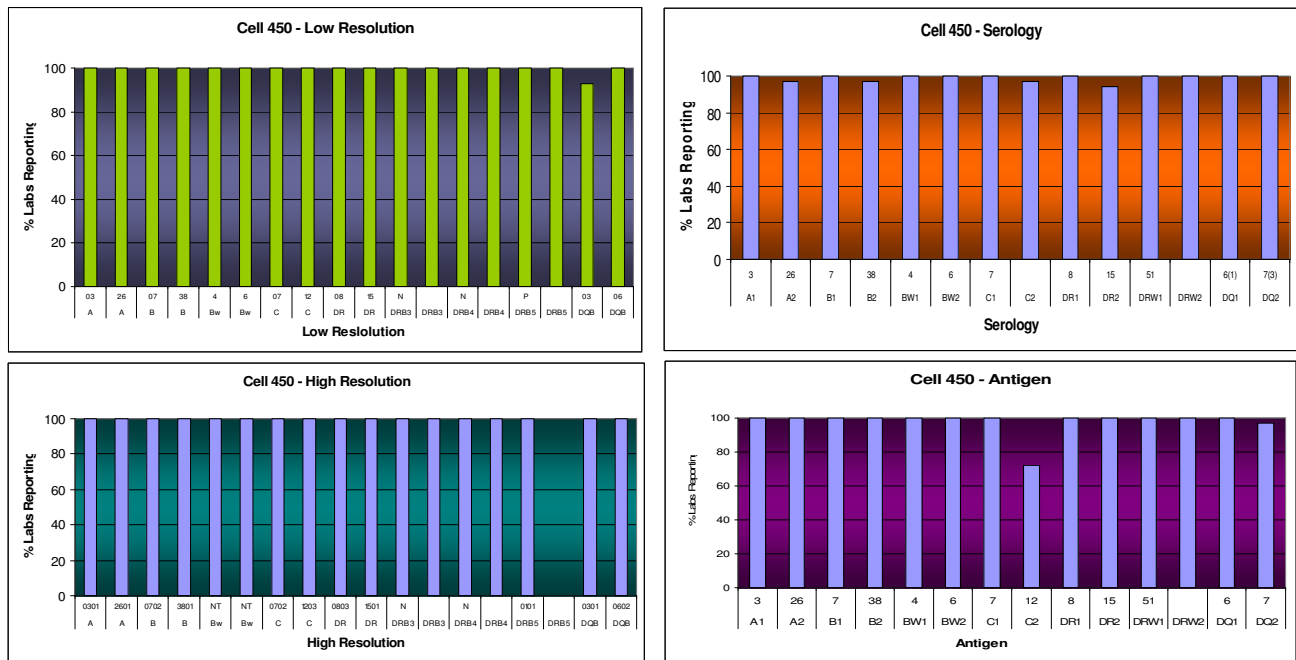


CELL 449 (Caucasian) Antigen Level: **HLA: A1, A32; B35, B64 (Bw6); Cw4, Cw8 ; DR13, DR15; DR51,DR52 ; DQ6, DQ-**

CELL 449 (Caucasian) High Resolution: **HLA: A*0101, A*3201; B*1401, B*3501; Cw*0401,Cw*0802-; DRB1*1302, DRB1*1501; DRB3*0301, DQB1*0602, DQB*0609**

This Caucasian donor, also reached consensus for Class 1 and Class 2 antigens, at the serology, low-resolution, high resolution and antigen level for all loci. High resolution results indicate that this cell has 2 alleles for DQ6, (DQB*0602 and DQB*0609), but antigen level consensus was for DQ6.

Cell 450- Caucasian

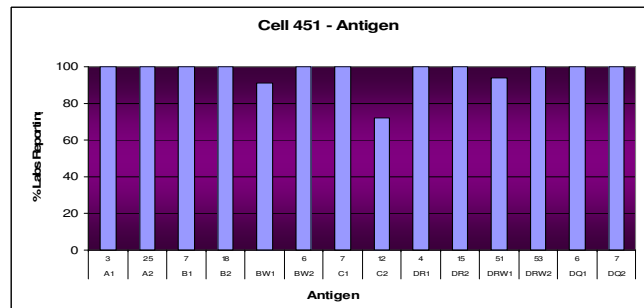
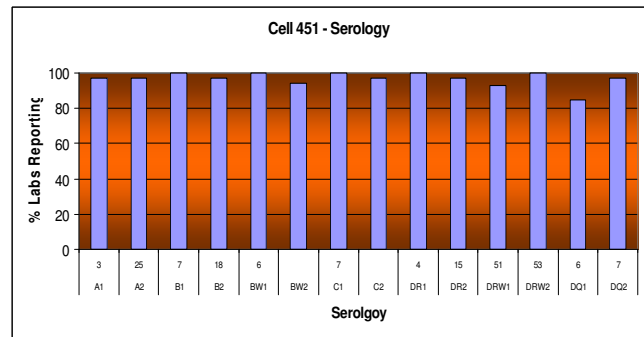
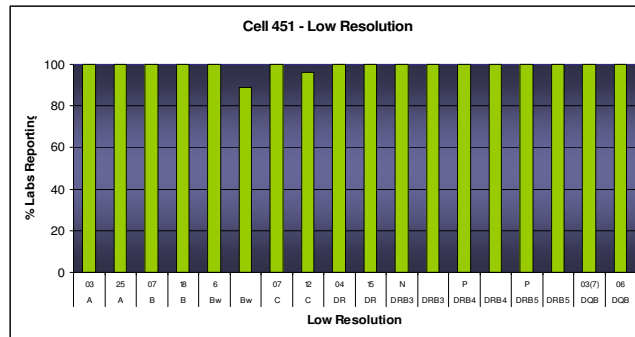


CELL 450 (Caucasian) Antigen Level: **HLA: A3, A26; B7, B38 ;Bw4 ,Bw6; Cw7, Cw12; DR8, DR15; DR51; DQ6, DQ7**

CELL 450 (Caucasian) High Resolution: **HLA: A*0301, A*2601; B*0702, B*3801; Cw*0702, Cw*1203; DRB1*0803, DRB1*1501; DRB5*0101; DQB1*0301, DQB1*0602**

This cell is from a Caucasian donor presented has a Cw12 which did not reach consensus at the antigen level. Cw12 was reported by 72% of the labs for serology and antigen levels, There are no Cw12 serological reagents available, so molecular techniques are required to detect those alleles.

Cell 451 - Caucasian



CELL 451 (Caucasian) Antigen Level: **HLA: A3, A25; B7, B18; Bw6; Cw7, Cw12; DR4, DR15; DR51, DR53, DQ6, DQ7**

Cell 451 High Resolution: **HLA: A*0301, A*2501; B*0702, B*1801; Cw*0702, Cw*1203; DRB1*0407, DRB1*1501; DRB4*0103; DRB5*0101; DQB1*0301, DQB1*0602**

Cell 451 is also from a Caucasian donor. All alleles, except Cw12, as in the previous cell also reached consensus. Cw12 was reported by 72% of the labs primarily due to the fact that there are no serological reagents available.

Conclusions: As seen in past exchanges, most laboratories continue to employ a combination of serological and molecular techniques to assign serological, antigen level and low and high resolution results. We need more of the participating labs to submit the high resolution level results in future exchanges. AFDT Proficiency Testing sub-committee is strongly encouraging labs that perform high resolution typing to report their results. This will make it much easier for the committee to evaluate the types reported.

The AFDT welcomes any suggestions and comments about improving the Proficiency Testing Program that we currently offer. The AFDT PT program is the oldest of its kind, and is looking forward to many more years of productive service to the transplant community. We are anxious to provide a PT program that is beneficial to you individual situations and your input is always welcomed.

The next AFDT challenges will be Cell Typing - March, 2008.