



AFDT

Proficiency Testing Program Report

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AFDT Proficiency Testing Results – November, 2006

SUMMARY REPORT Cell Sendout:

The November Cell sendout was sent out this year under the new AFDT (American Foundation for Donation and Transplantation) name. Please make note these changes and notify all appropriate individuals at your respective institutions, accrediting agencies, and states etc, of this name change. The mission and goals of the proficiency testing programs will remain unchanged, even though the name changes in 2006.

AFDT Proficiency Testing will continue to send 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. For a detailed set of instructions and current policies, please refer to the AFDT/SEOPF web site (www.seopf.org).

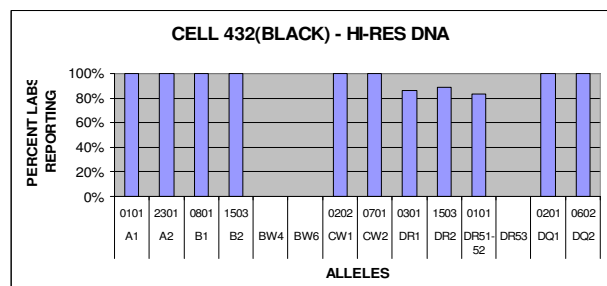
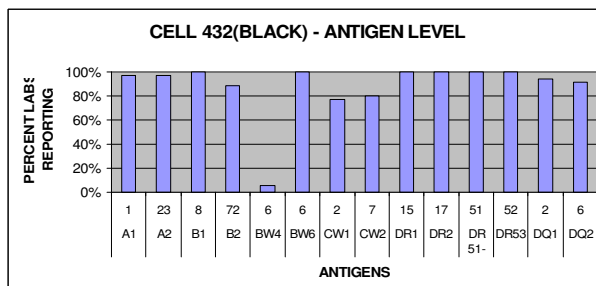
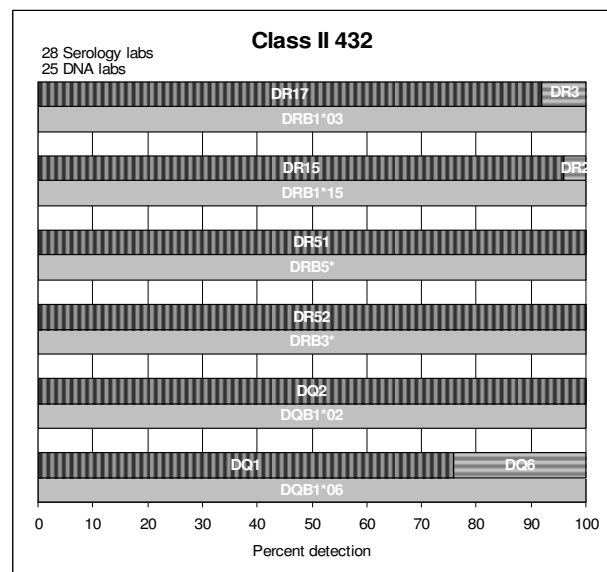
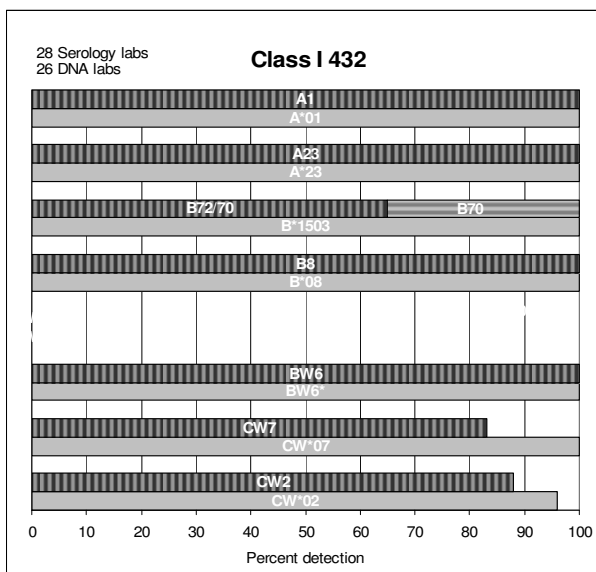
DCI Laboratories in Nashville, TN was the sending laboratory for this second exchange. As a reminder, there were some modifications in the grading criteria for 2006. Results are now graded and the definition of consensus has changed this year from 85% to 80%. **Consensus** is now reached when 80% or 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, the **entire cell will be counted as a miss if there is any incorrectly assigned antigen which has reached consensus.** 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).

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 correct results, since they will be graded. The report below is a summary of the NOVEMBER, 2006 results. Consensus antigens and alleles are bolded. Alleles reported by the majority of the labs are designated with a ().

In the following report, each cell will be 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 432 – Black

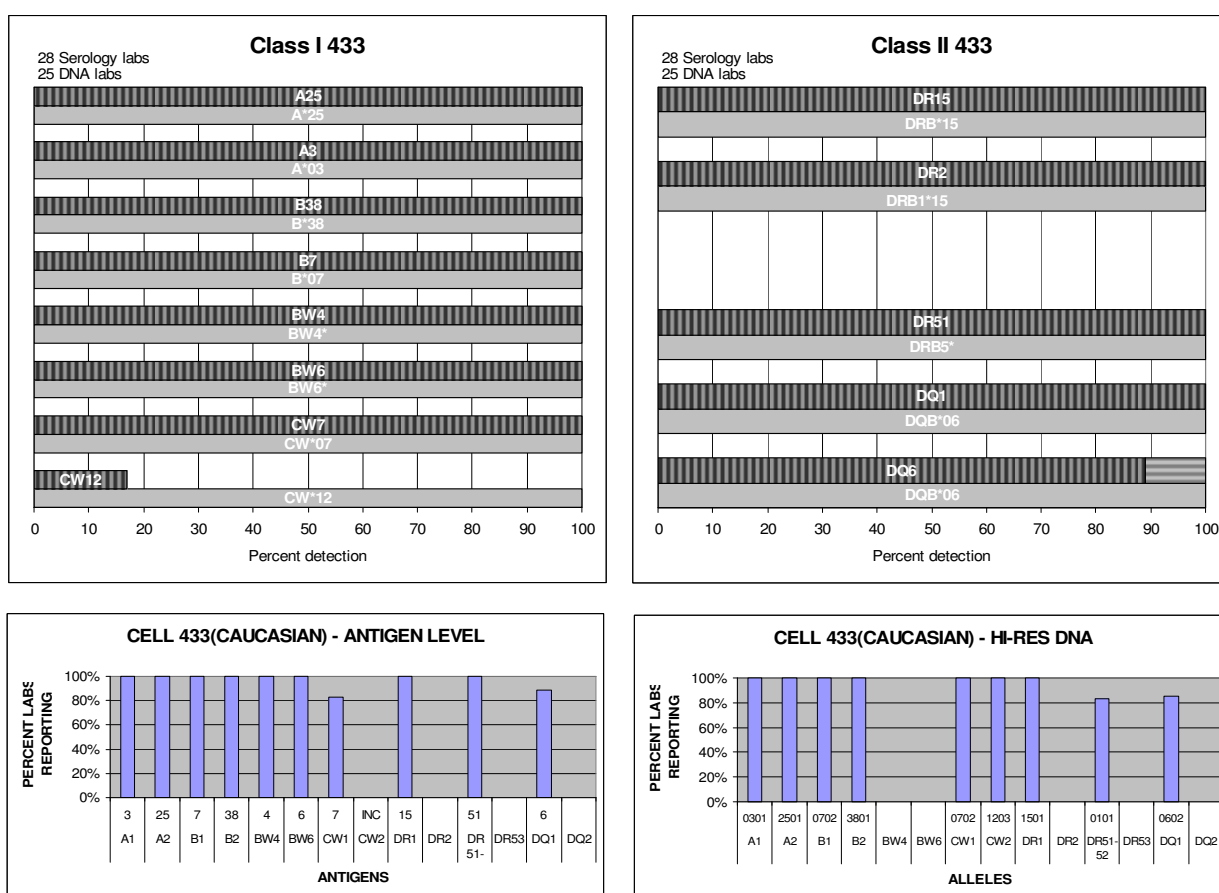


CELL 432 (Black) Antigen Level: **HLA: A1, A23; B8, B72, (Bw6); Cw2, Cw7; DR15, DR17; DR51, DR52; DQ2, DQ6**

CELL 432 (Black) High Resolution: **HLA: A*0101, A*02301; B*0801, B*1503, Cw*0202, Cw*0701; DRB1*0301, DRB1*1503; DRB3*0101, DRB5*0101; DQB1*0201, DQB1*0602**

Cell 432 is from a Black donor. All alleles met consensus in this cell by serology, low resolution, antigen level and high resolution methods.

Cell 433 - Caucasian



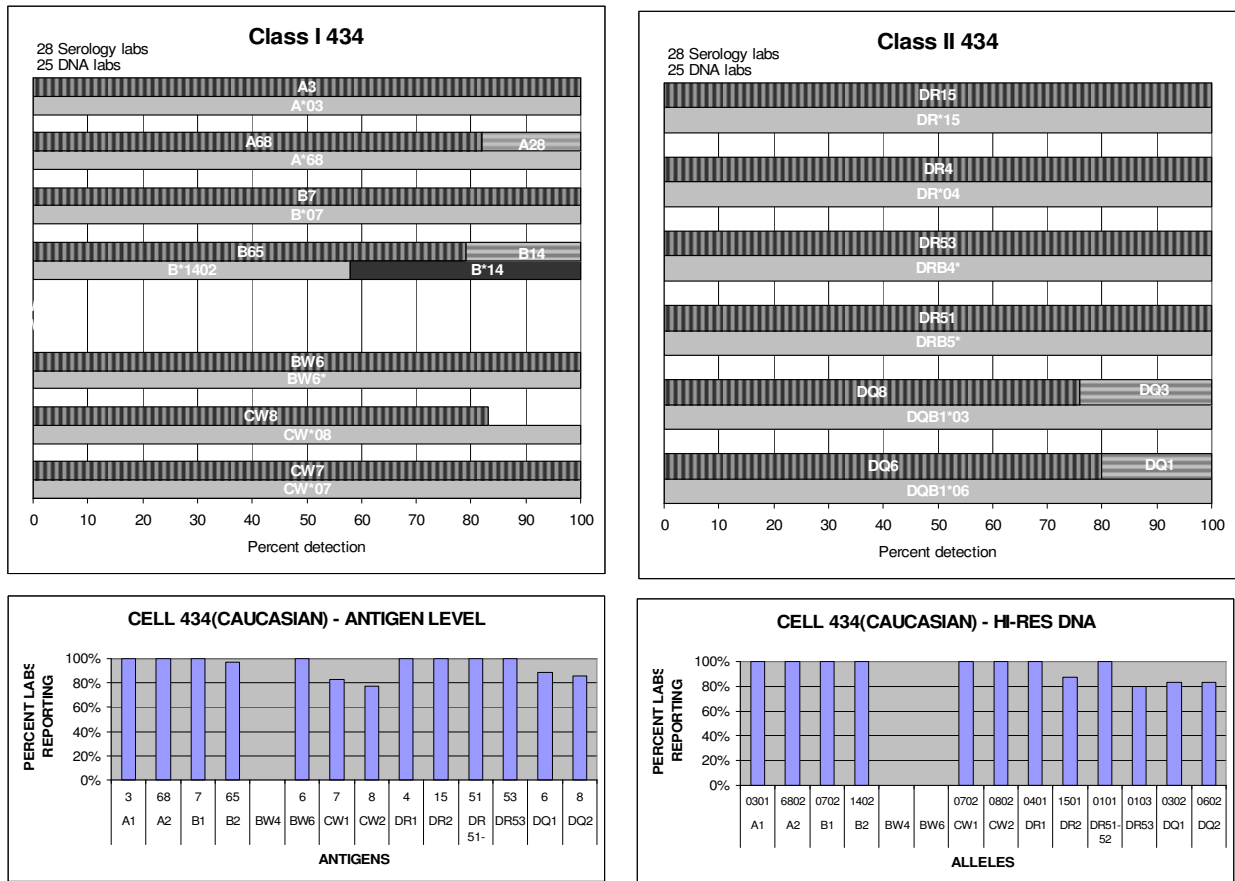
CELL 433 (Caucasian) Antigen Level: **HLA: A3, A25; B7, B38, (Bw4, Bw6); Cw7, Cw-; DR15, DR-; DR51; DQ2, DQ6 (1)-**

CELL 433 High Resolution: **HLA: A*0301, A*2501; B*0702, B*3801; Cw*0702, Cw*1203; DRB1*1501, DRB1*1501; DRB5*0101; DQB1*0602**

This cell is from a Caucasian donor, also reached consensus for Class 1 and Class 2 antigen, by all methods for all alleles, as did the previous cell 432. Only 17% of the labs

reported Cw12 by serology. Cw12 was detected by all labs using molecular typing, but since there is no serological equivalent, most serology labs did not report Cw12. The serological labs also were unable to determine if this cell is DR15 homozygous, as was reported by the high resolution typing labs. DQ6 was reported by 77% of the labs and DQ1 by the others 23% using serological methods alone. DQ6 is also very difficult to assign by serological methods alone.

Cell 434 – Caucasian

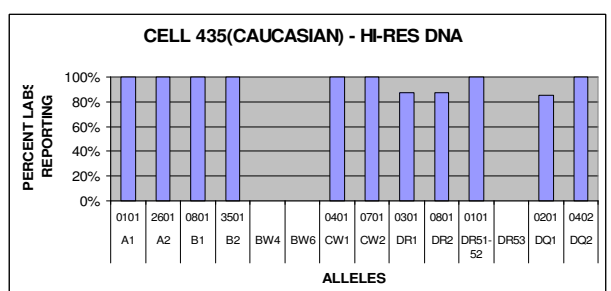
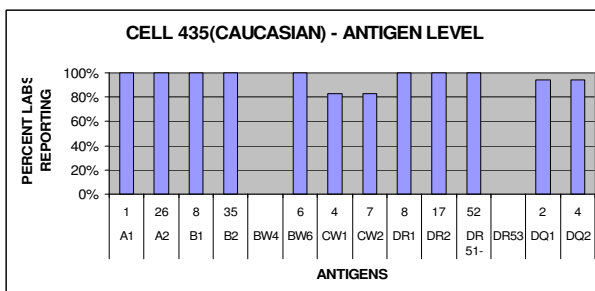
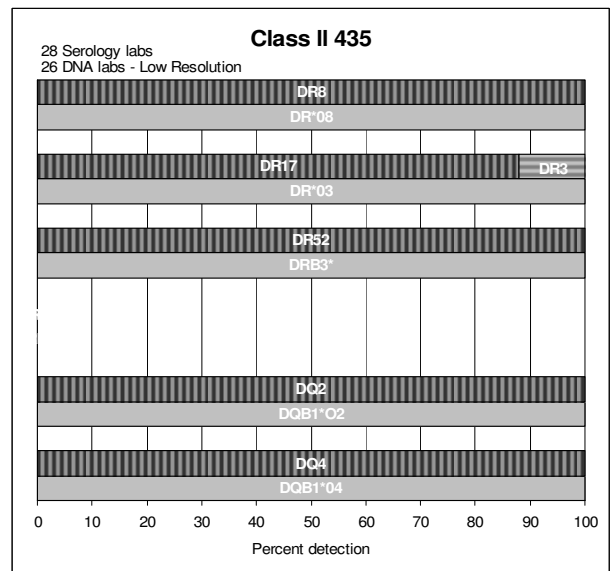
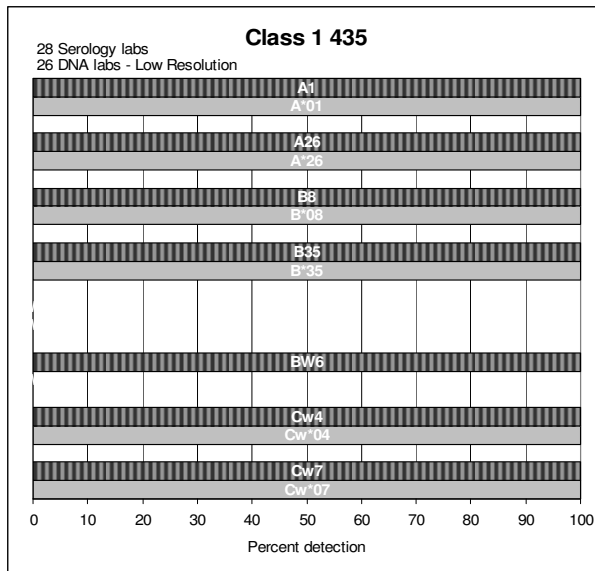


CELL 434 (Caucasian) Antigen Level: **HLA: A3, A68; B7, B65, (Bw6); Cw7, Cw8; DR4, DR15; DR51, DR53; DQ6 (1), DQ3(8)**

CELL 434 High Resolution: **HLA: A*0301, A*6802; B*0702, B*1402; Cw*0702, Cw*0802; DRB1*0401, DRB1*1501; DRB4*0103, DRB5*0101; DQB1*0302, DQB1*0602**

This cell, also from a Caucasian donor, reached consensus, both for Class 1 and Class 2 antigens, at the serology, low-resolution, high resolution and antigen level for all loci. B65 is usually difficult to assign using serology alone, but 79% of the labs did assign this split, and the remainder reported B14. Cw8 was reported by 83% of the serology labs. All serology labs reported DQ1, and 80% reported DQ6 as the split. DQ splits are very difficult to assign using serological methods alone. The same is true for DQ8 which is hard to assign using serology alone, but 76% reported this split as well, and the remainder reporting DQ3 (24%).

Cell 435- Caucasian

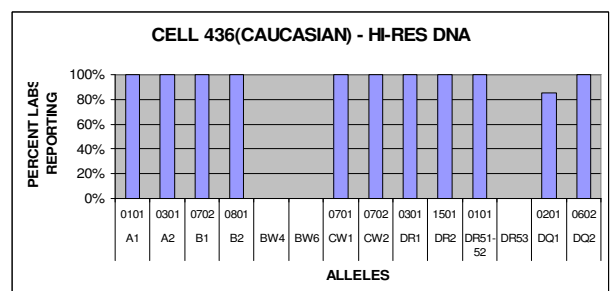
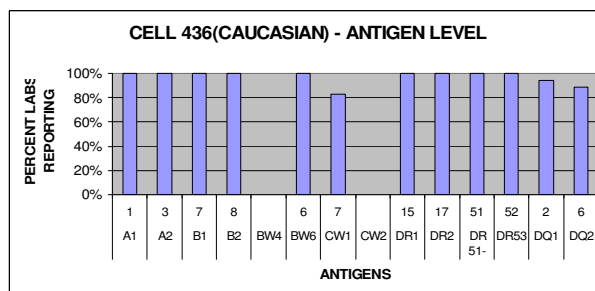
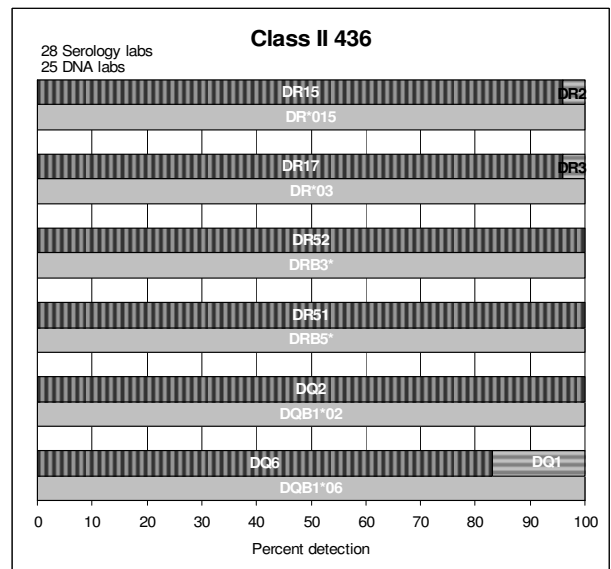
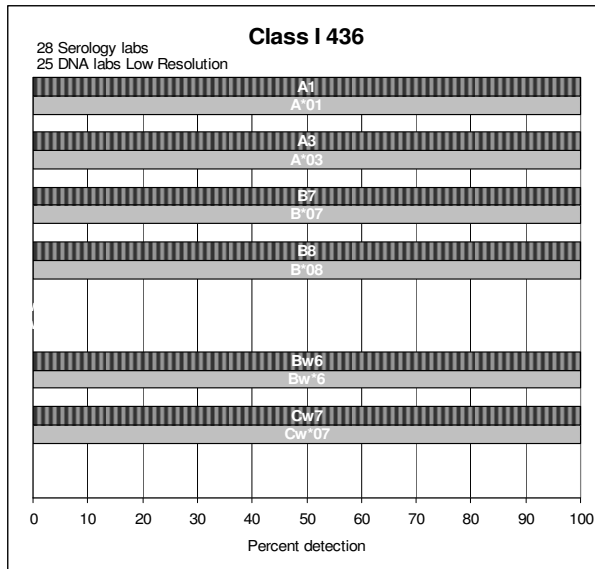


CELL 435 (Caucasian) Antigen Level: **HLA: A1, A26; B8, B35, (Bw6); Cw4, Cw7; DR8, DR17; DR52; DQ2, DQ4**

CELL 435 High Resolution: **HLA: A*0101, A*2601; B*0801, B*3501; Cw*0401, Cw*0701; DRB1*0301, DRB1*0801; DRB3*0101; DQB1*0201, DQB1*0402**

This cell is from another Caucasian donor presented very little challenges to any labs, even those using only serological methods. These relatively common alleles were not problems for any labs, as all methods reached consensus, for all alleles and antigens.

Cell 436 - Caucasian



CELL 436(Caucasian) Antigen Level: **HLA: A1, A3; B7, B8 (Bw6); Cw7, Cw- ;DR15, DR17,DR51, DR52, DQ2, DQ6 (1)**

Cell 436 High Resolution: **HLA: A*0101, A*0301; B*0702, B*0801; Cw*0701, Cw*0702; DRB1*0301, DRB1*1501; DRB3*0101; DRB5*0101; DQB1*0201, DQB1*0602**

Cell 436 is also from a Caucasian donor. All alleles reached consensus on this very common cell type. Again, serological reagents are difficult to use for DQ6 by serological methods, but 89% reported this split.

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. The 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 your individual situations and your input is always welcomed.

The next Cell Typing only PT send-out will be March 5, 2007.