

It Takes Two Methods to Tango
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Background

During 2006 it was announced that Tecan was no longer going to support the automated pipetter Tecan Megaflex as of February 2007. The Megaflex was used for pipetting donor antibody screens using Gel (Ortho Clinical Diagnostics, Raritan, NJ). February 2007 the Tango™ (Olympus America, Irving, TX) was implemented for donor antibody screens.

Method

A retrospective review of antibody screens was performed from January 2006 to July 2007 and compared between Gel and Tango™. A retrospective review of antibodies specificities identified was also performed from June and July of 2006 and 2007.

Results

Antibody Screen Positive Rates

Assay	Index Donors (Total)	# Positive	% Positive	# Panel Positive	% Panel Positive (Panel pos/#index)	% of Reactive /Positive Panel	# Panel Negative	Panel NT	% False Positive	% Sensitivity
Gel EDTA	95812	272	0.29	211	.22	76.17	48	14	23.83	100
Gel Serum	97,614	725	0.74	358	0.37	49.37	369	2	50.90	98.90
Tango Serum	98,821	608	0.62	315	0.32	51.81	288	4	47.37	98.84

Antibodies Identified

Anti	June and July 06	June and July 07	Newly identified June and July 06	Newly identified June and July 07
-D	23	38	5	5
-E	9	21	4	2
-K	13	18	2	5
-D,-C	5	11	1	2
-c	4	4	1	1
-Fy ^a	3	3	2	1
Other	21	22	11	6

Conclusion

There is no significant difference when comparing false positive antibody screens rates between Tango™ and Gel Serum. However, when comparing all 3 methods Gel EDTA had a significantly lower false positive rate. All methods detected donors with previously identified clinically-significant antibodies. The rate of new antibodies identified was similar for the 2 months studied. More donors with antibodies donated in June and July 2007 accounting for the higher number observed.