MEMORANDUM

TO: Dr. Charles Ye, Laboratory Medical Director Southlake Regional Health Centre

Dr. Simon Raphael, Laboratory Medical Director, Markham Stouffville Hospital

FROM: Dr. D. Yamamura, Head of Bacteriology and Mycology

Dr. M. Smieja, Discipline Director for Microbiology

RE: Change in Reporting of Flagged Positive Blood Cultures when No Organisms

are Seen

DATE: August 30, 2016

Blood cultures are incubated on-site at Southlake Regional Health Centre and Markham Stouffville Hospital. The blood culture instrument flags the blood culture as positive based on a change in CO₂ or O₂ in the bottle reflecting potential growth. A preliminary blood culture report is issued as follows:

Southlake: "Culture sent to Hamilton for further investigation. Refer to accession #..."

Markham-Stouffville: "Blood Culture Positive, Gram Stain Result to Follow, Culture to Follow,"

The bottle is then sent to the Hamilton Regional Laboratory Medicine Program for gram stain interpretation and culture. When the gram stain is reviewed, a small percentage will not have any organisms seen. In most cases, blood cultures are flagged as positive by the instrument due to an elevated WBC in the patient (false positive) or more rarely, may be due to very low numbers of the organism or the organism is fastidious - no report is issued. This will change. When no organisms are seen, a preliminary report will now be issued:

Gram Stain: No organisms seen Culture: Culture in progress

The blood culture bottle will continue to be incubated and cultured to ensure detection of any organisms.

Please do not hesitate to contact Dr. D. Yamamura (905 527-4322 ext 46111) or the Medical Microbiologist on call (905 527-4322 and ask for paging).