Results (if a Case Study enter NA): Experimenting with varying amounts of blood inoculum, 10 ml of blood was determined to provide the best results for detection and growth/viability as well as propose a theoretical growth curve for the organism.

Conclusion: We found that in 100% of the isolates tested (and all the variations of testing within), SPS (up to a concentration of 0.05 % w/v) in commercially available blood culture bottles appeared to be inactivated, allowing for the growth detection and culturing of S. moniliformis using an automated continuous blood culture system when 10 ml of blood was inoculated.

Blood Groups of Recipients of COVID-19 Convalescent plasma

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Introduction/Objective: COVID-19 Convalescent plasma therapy (CCP) is under an FDA Emergency Use Authorization to treat hospitalized patients with COVID-19. However, being ill enough to require hospitalization for COVID-19 is a negative outcome. There is also contradictory literature on whether ABO blood group is associated with worse outcomes with COVID-19 disease. Therefore, we share a regional Veterans Administration Medical Center (VAMC) experience comparing the blood groups of patients intended to receive CCP to a control group of patients positive for SARS-CoV-2.

Methods/Case Report: A retrospective review of all patients who had CCP ordered in the year 2020 was performed to identify the blood group of these patients, which was compared to a control population of positive patients early in the pandemic (March 17th, 2020 to May 20th, 2020).

Results (if a Case Study enter NA): A total of 15 patients had CCP ordered as part of their care with an age range of 56-85 (average 69.7) years of age, entirely male composition, and a racial breakdown of 13 African Americans (86.7%), 1 Caucasian American (6.7%), and 1 Asian American (6.7%). The blood group distribution amongst these 15 patients for CCP was 1 AB+ (6.7%), 5 A+ (33.3%), 4 B+ (26.7%), and 5 O+ (33.3%).

The unrelated control population consisted of 81 SARS-CoV-2 positive patients whose blood groups were distributed as 3 group AB (3.7%), 21 group A (25.9%), 15 group B (18.5%), and 42 group O (51.8%). A Chi squared test did not show a statistically significant difference between the two groups in ABO composition.

Conclusion: The ABO proportions of patients for whom CCP was ordered compared to the control group was not statistically significant. This provides support to the literature arguing that ABO may not be related to worse outcomes such as hospitalization or need for CCP transfusion.

Comparison of virus concentration methods for the reverse-transcriptase quantitative PCR (RT-qPCR)-based detection of bacteriophage Φ6, an enveloped virus surrogate for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA, from untreated wastewater at St. George's University (SGU), Grenada.

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Introduction/Objective: With the ongoing coronavirus disease 2019 (COVID-19) pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and the consequent opening of borders, it is of paramount importance to monitor communities for the presence of potential COVID-19 clusters. Wastewater-based epidemiology (WBE) is an effective way to monitor community spread of pathogens and has been implemented in many countries to identify potential outbreaks. Most standardized methodologies used in WBE for the detection of viruses have been validated for non-enveloped viruses; therefore, there is a need for the creation of a standardized method for the detection of enveloped viruses, such as SARS-CoV-2.

Methods/Case Report: Wastewater seeded with a Pseudomonas syringae bacteriophage (Φ6) was used to test the efficiency of five wastewater virus concentration methods. Two methods were based on AlCl3 flocculation with different pH adjustments. The other methods utilized membrane filtration followed by beef elution: one added a pretreatment with HCl; another added a pretreatment with MgCl2; and finally, an untreated control. A known amount of Bacteriophage Φ6 was used for all methods, and detection was quantified by reverse-transcription quantitative polymerase chain reaction.

Results (if a Case Study enter NA): The Cq values for each method, ranging from 24.38–38.6, were compared. The highest recovery of Φ6 was obtained with the AlCl3 flocculation method with an adjusted pH of 6, followed in descending order by MgCl2-pretreated sample with beef elution; HCl-pretreated sample with beef elution, the untreated sample, and AlCl3 flocculation method with an adjusted pH of 3.5.

Conclusion: The results suggest that AlCl3 flocculation with an adjusted pH of 6 may be a quick and cost-effective methodology for the detection of enveloped viruses in WBE. This can facilitate the implementation of WBE at SGU, Grenada, as a useful tool to conduct active surveillance and track outbreaks of enveloped viral diseases, such as SARS-CoV-2.