Survey of Cosmetics

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Study Outline

- Study aim
 - To screen skin lightening creams and other cosmetics for the presence of mercury
- Objectives
 - Measure the mercury content of skin lightening creams and cosmetics bought in retail outlets in Antigua and Barbuda
 - Analyse a statistically representative number of samples in order to inform on generalized risk posed by skin lightening creams and cosmetics



Human Health Risk

- Adverse health effects associated with inorganic mercury exposure through use of skin lightening creams and soaps:
 - Kidney damage
 - Skin rashes
 - Skin discoloration
 - Scarring
 - Reduced resistance to fungal and bacterial infections
 - Anxiety
 - Depression
 - Psychosis
- Associated risk through exposure to organic forms of mercury typically found in mascara and eye makeup cleaning products:
 - Vary degrees of toxicity to the nervous, digestive and immune systems
 - Effects on the lungs, kidneys, skin and eye



Best quantified in blood and urine

> Products not covered by the Convention



Sample Collection

- 135 brands collected in duplicate thus far
 - Skin lightening creams
 - Lotions
 - Soap
 - Serum
 - Mascara
 - Eyeshadow
 - Eyeliner



Analytical Procedure

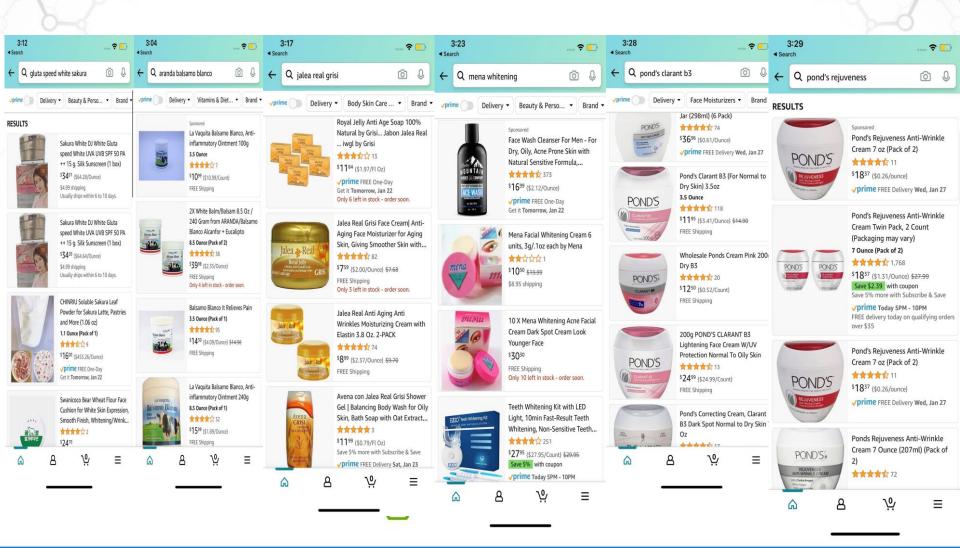
Initial screening with X Ray Fluorescence



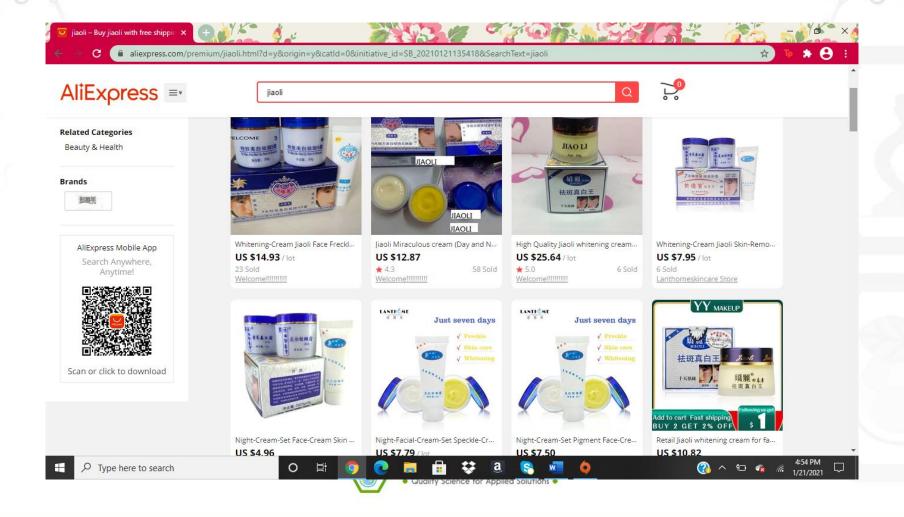
Final analysis with Milestone DMA



Terrible 80 Survey



Antigua and Barbuda Platform



Next Steps

- Expression of interest from countries
- Provision of necessary laboratory services by Antigua and Barbuda
- Collaboration with GEF project on skin lightening cream
- Review of imported cosmetics of interest into Antigua and Barbuda
- Risk determination and complementary research



