



Houston Forensic Science Center

INTEROFFICE MEMO

To: Fredria Bayless, Forensic Scientist – Toxicology

From: Corissa L. Rodgers, M.S., D-ABFT-FT, Supervisor – Toxicology

cc: Dayong Lee, Ph.D., F-ABFT, Manager – Toxicology
Quality Division

Date: December 8, 2022

Re: Authorization of drug screening/confirmation analyses by gas chromatography-mass spectrometry (GC-MS)

This memo reauthorizes Ms. Bayless to perform analyses using the drug screen and qualitative confirmation by GC-MS [BSD] and authorizes her to perform analysis using the carisoprodol/meprobamate confirmation by GC-MS [CAR] method. Finally, it reauthorizes Ms. Bayless to write test reports for casework in the Toxicology section using GC-MS methods.

These authorizations are based upon her successful completion of Sections 9 and 14 of the Toxicology Section Training Manual v.3.8, including:

- 1) BSD required readings, BSD study questions, oral examination that covered GC-MS drug screen and confirmation analyses including CAR concepts, and a mock trial completed during initial authorization and detailed in "Authorization of GC-MS Analysis, Method Validation, Testimony and Technical Review" dated 10/10/2019;
- 2) CAR required readings, including validation packet on 07/20/2021, standard operating procedures on 02/15/2022, and uncertainty of measurement packet on 11/18/2022; and CAR study questions on 04/18/2022, as outlined in section 14;
- 3) Laboratory exercises completed on 09/22/2022 that included:
 - a. Validation batches BSD_20210311U_FB, BSD_20220426U_FB, BSD_20220519B_FB (data not used), and BSD_20220609U_FB in Validation_BSD_GCMS-3_Urine_Eff. 2021-06-30 and Validation_BSD_GCMS-6_Urine_Eff. 2022-08-31;
 - b. Practice batches BSD_20211208B_FB, CAR_20220215B_FB, CAR_20220224U_FB, and CAR_20220302B_FB;

- c. Practicing batch data processing from previously completed batches BSD_20220531B_VC and CAR_20220610B_AAJ on 09/22/2022,
 - d. Observance of qualitative BSD case reports (2021-28706 and 2021-28707) and 4 positive case reports (2021-29670, 2021-30291, 2020-17155, 2021-19343) on 03/03/2022 (*note: fewer cases were observed than described in the Training Manual due to her previous authorization dated 10/10/2019 which included writing positive case reports*);
 - e. Drafting at least 5 qualitative BSD case reports (2021-00079, 2021-00080, 2021-00167, 2021-00168, 2021-00169, 2022-00001, 2022-00002, 2022-00003, 2022-00004, 2022-00005; 2021-00178 and 2021-00181 were drafted but not reviewed) and 5 CAR case reports (2022-00010, 2022-00011, 2022-00012, 2022-00013, 2022-00014) on 04/11/2022; and
 - f. Supplemental study questions related to the Toxicology Analytical Manual sections 3-6, 8-10, 14-15, and 19, completed on 08/30/2022; and
- 4) Competency testing, which included:
- a. An initial requalification for BSD (BSD_20210610B_FB and BSD_20210629B_FB) completed on 07/08/2021;
 - b. An initial CAR competency performed on 04/20/2022 but not successfully completed; and
 - c. BSD and CAR competency successfully completed on 10/26/2022, which included batches BSD_20220929B_FB, BSD_20221011B_FB, CAR_20221013B_FB and CAR_20221025B_FB.

Ms. Bayless' satisfactory competency test included analysis of 5 blood samples fortified with drugs from both BSD and CAR scopes at different concentrations (requests 002 in 2022-00045, 2022-00046, 2022-00047, 2022-00048, and 2022-00049) in the development JusticeTrax system, and writing subsequent toxicology reports. Ms. Bayless completed 3 further case reports to demonstrate report writing competency (requests 001 in 2022-00089, 2022-00090 and 2022-00091).

Ms. Bayless has been authorized to use the equipment associated with the GC-MS analyses. This equipment includes but is not limited to: Agilent GC-MS, SPE extraction equipment, Turbo-VAP, balances, vial crimpers, pipettes, pH meter, and Millipore Water System.

Ms. Bayless is authorized to provide opinions and interpretations pertaining to the GC-MS drug analyses.

Note: Though Ms. Bayless was previously authorized on 10/10/2019 to perform cannabinoids confirmation by GC-MS, confirmation of cannabinoids is now performed using liquid chromatography-tandem mass spectrometry and will require a separate authorization.