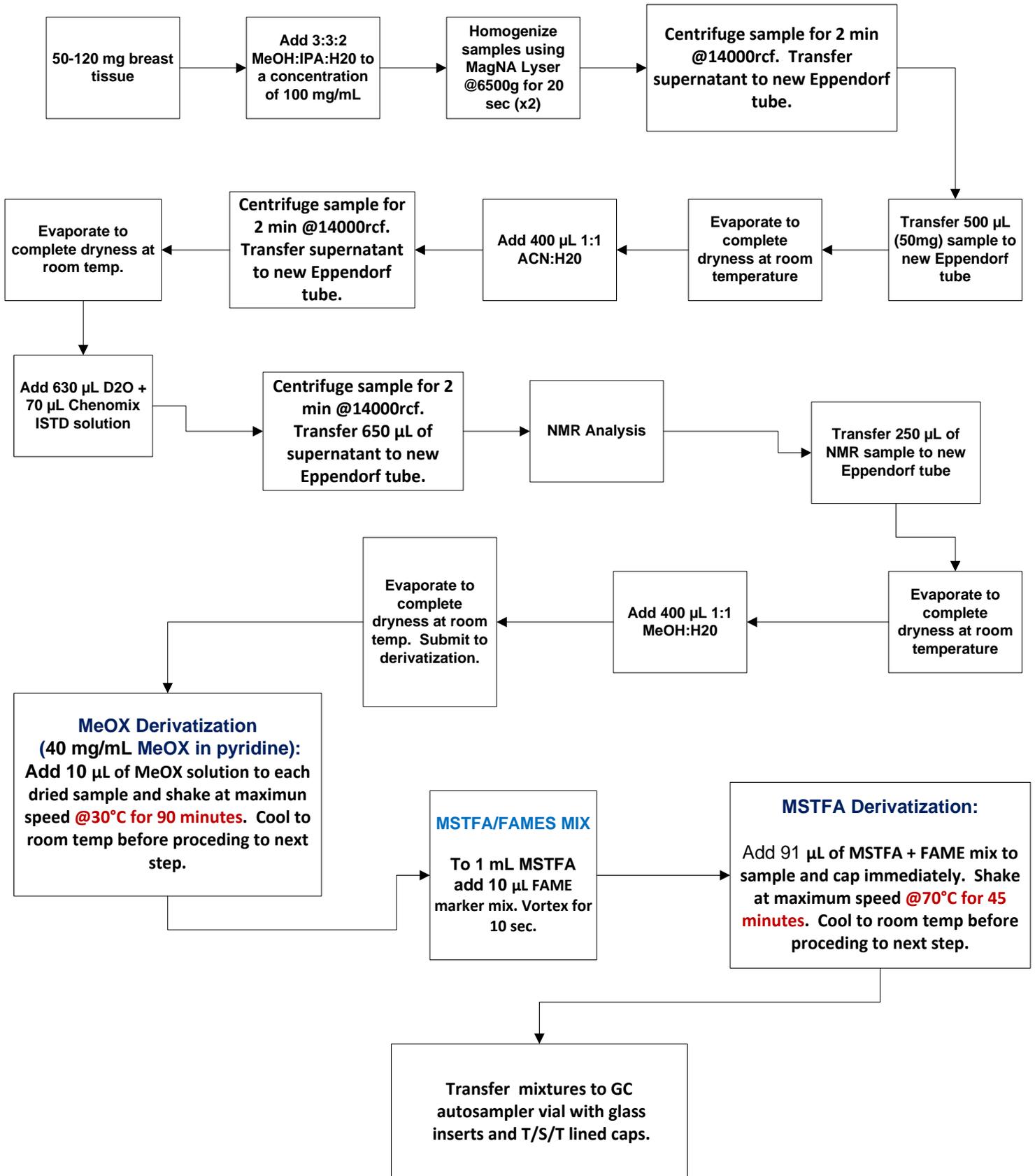


# Breast Tissue Sample Prep



## QC and FAMES Solutions Prep

Solvents needed: H<sub>2</sub>O, chloroform, methanol (MeOH), isopropanol (IPA)

**Solution A Prep:**  
Prepare a mixture of H<sub>2</sub>O:MeOH:IPA (1:2.5:1, v/v/v).  
Purge with nitrogen gas for 2 min.

**MeOX Solution Prep:**  
Weigh out 40 mg MeOX and dilute in 1 mL pyridine. Sonicate for 60 min to dissolve MeOX completely. Store at room temperature.

### QC Prep

### FAMES Prep

#### Prep of Individual QC Solutions:

Weigh standards into glass vials according to Table 1 (*QC and FAME preparation for GC/TOF, SOP Code:QC+FAMEprep11082012*) to the nearest decimal.

Dissolve standards in 1 mL of appropriate solvents as listed in Table 1.

#### Prep of Fatty Acid Methyl Esters (FAME) Markers:

- Measure standards into separate vials according to Step 6 the *QC and FAME preparation for GC/TOF, SOP Code:QC+FAMEprep11082012*.
- Add 1 mL of chloroform to each vial and vortex.

#### QC Stock Solution Prep @40 µg/mL:

- Add 25 mL of Solution A to 250 mL volumetric flask.
- Transfer all individual standard solutions quantitatively to the 250 mL flask.
- Fill flask to the 250 mL mark using Solution A.
- Stir for 30 min with stir plate/stir bar to dissolve all compounds completely.
- Transfer to amber bottle.  
**Keep refrigerated.**

- Combine the contents of all 13 vials into a 25 mL volumetric flask.
- Bring to a final volume of 25 mL with chloroform.
- Mix using a stir plate/stir bar.
- Transfer contents to an amber bottle.

**Keep refrigerated.**

#### QC Working Solution Prep @10 µg/mL:

Dilute 2.5 mL of QC stock solution to 10 mL with Solution A.

*Six point calibration solutions are prepared from the working QC solution.*

**Keep refrigerated.**

## Serum/Blood Solutions Prep

Chemicals needed: acetonitrile (ACN), H<sub>2</sub>O, isopropanol, methoxyamine HCL (MeOX), pyridine, MSTFA

### *Individual Solutions Prep*

#### Extraction Mix A Prep:

Prepare a mixture of ACN:IPA:H<sub>2</sub>O (3:3:2).  
Store in freezer @-20°C.

#### Extraction Mix B Prep:

Prepare a mixture of ACN:H<sub>2</sub>O (1:1). Store in freezer @-20°C

#### MeOX Solution Prep:

Weigh out 40 mg MeOX and dilute in 1 mL pyridine. Sonicate for 60 min to dissolve MeOX completely. Store at room temperature.

#### MSTFA + FAME Mix Prep:

To 1 mL of MSTFA, add 10 µL of FAME marker solution.