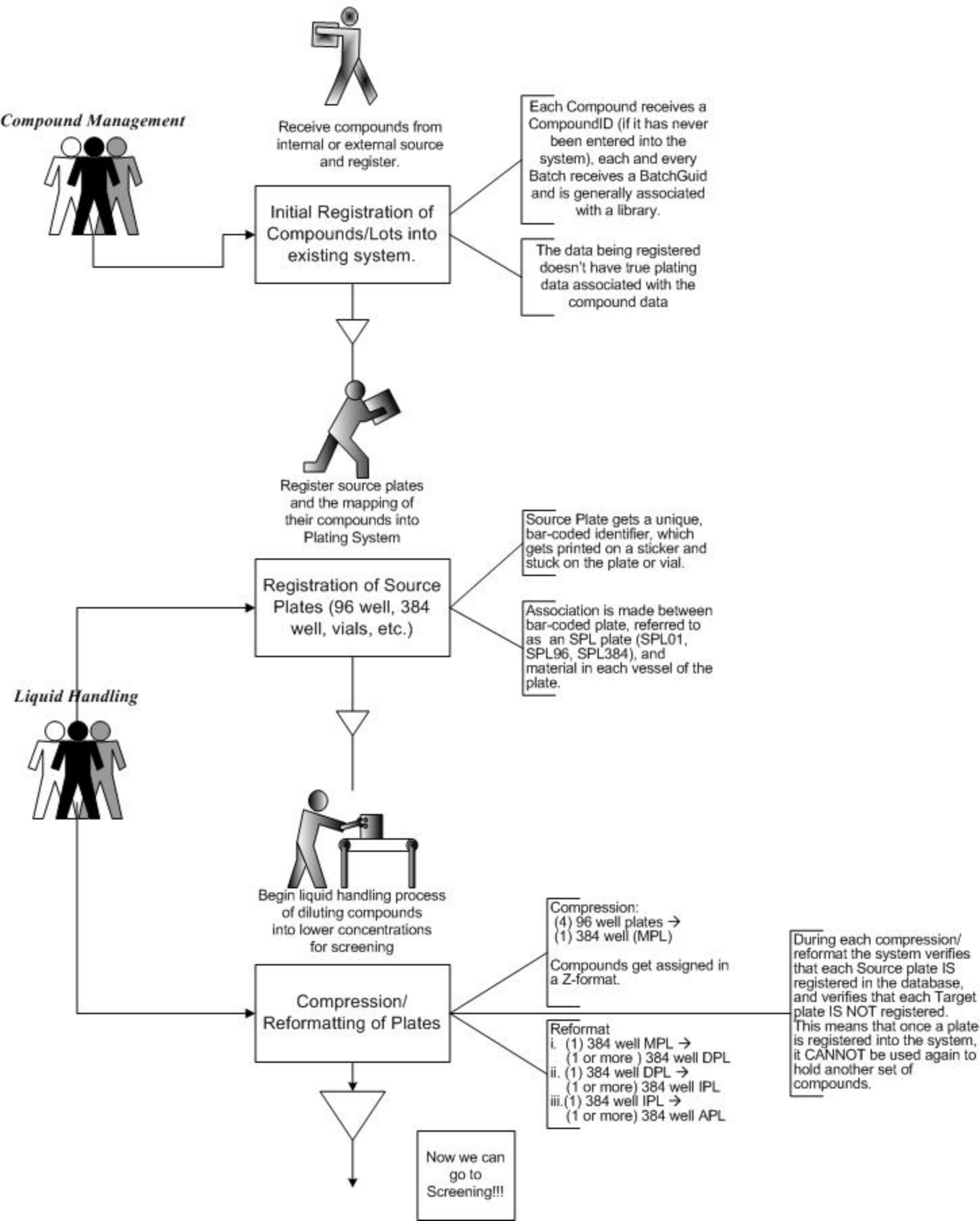


# General Workflow of Compounds, Plates, and Screens





Register the Screen through the New HTS Screening System

Register Screen into HTS System

Enter :  
Screen Name,  
Target,  
Ligand Class,  
Assay Format  
(detection method,  
machine),  
SOP,  
normalization factor,  
any remark



Validation of the Assay Development on which you have worked so diligently

Register Control Run and Enter Data

Enter for the High and Low Controls:  
Minimum  
Maximum  
Average  
Std Deviation

Verify the calculated Z-prime value (should be greater than 0.5) and accept/reject run based on Z-prime value

Register and perform Initial Run (only if a Control Run has been accepted)

Select target batch and load raw data through RunLoader.

View Controls and Silence control wells as appropriate (not more than 5% of all controls)

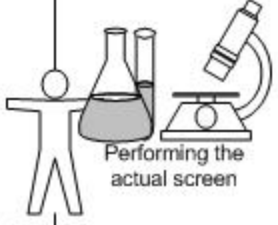
Note dynamic updates to Z-prime. Verify the calculated Z-prime value (should be greater than 0.5) and accept/reject run based on Z-prime value.

Upon acceptance, the % inhibition is calculated and stored for each well.

Determine and Accept Positives, based on dynamic threshold for Percent Inhibition

\*\*\* With dynamic threshold, user determines cut-off threshold and accepts positives.

This will be the starting point for the Confirmation Run. The positive list can be exported into Excel for additional analysis, storage, etc.



Person 2

Register and perform Confirmation Run

Same steps as Initial Run, just no dynamic threshold. Instead we will be using the threshold set during the Initial Run.

Register and perform Dose Response Run

Same steps as before for action within Control Statistics Applet

Upon acceptance, the system calculates % Inhibition for each well, then, based on the empirical results obtained during the Dose Response Run, it will calculate the best-fit Dose Response curve to obtain best estimates for the IC50 value and Hill Coefficient.

The user then can peruse the list, and investigate any of the values in more detail by viewing the Dose Response Applet, an applet to enable manipulation of the IC50 curve. Here only 3 points may be silenced when calculating the new best-fit IC50 values.