Description of Additional Supplementary Files

**File name**: Supplementary Data 1  
**Description**: Numerical source of graphs from Figure 1 and Figure 7.

**File name**: Supplementary Data 2  
**Description**: Global whole heart TMT Flow-through Proteomics, Label-Free Phosphoproteomics, Imputed Phosphoproteomics (using KNN), and statistical analysis.

**File name**: Supplementary Data 3  
**Description**: Cardiac Sarcomere TMT proteomics, phosphoproteomics, normalized phosphoproteomics, and statistical analysis.

**File name**: Supplementary Data 4  
**Description**: Kinase Substrate Enrichment Analysis, Pathway Enrichment Analysis of identified modules.

**File name**: Supplementary Data 5  
**Description**: Contractility and LV chamber dimensions by M-mode, and tissue doppler echocardiography.

**File name**: Supplementary Data 6  
**Description**: Proteomics, comprehensive phosphoproteomics (Serine, Threonine, Tyrosine) in TgErbB2 and Tyrosine kinase receptor inhibition by AG-82.

**File name**: Supplementary Data 7  
**Description**: Kinase Substrate Enrichment Analysis, Pathway Enrichment Analysis of AG-825 and treatment vehicle (sham).