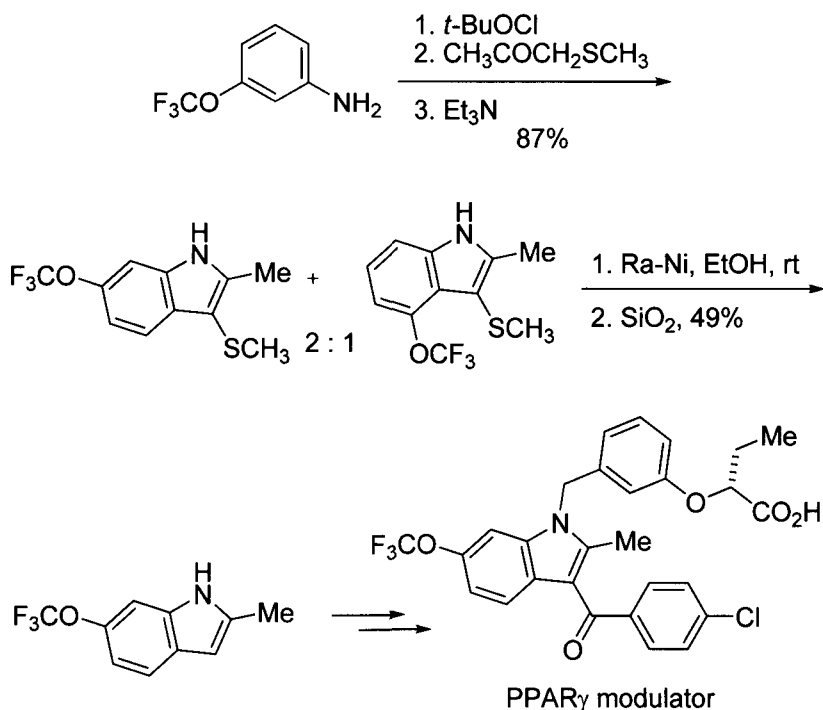


Although a few PPAR γ (peroxisome proliferator-activated receptor- γ) inhibitors including rosiglitazone (Avandia) and pioglitazone (Actos) are already on the market for the treatment of type-2 diabetes, the pursuit is still on-going for finding better PPAR γ inhibitors. In the discovery synthesis of a selective PPAR γ modulator by Merck,⁵³ the Gassman indole synthesis between *m*-trifluoro-methoxy-aniline and (ethylthio)acetone provided the desired indole regioisomer in a 2:1 ratio. Nonetheless, the major isomer of indole was converted to a potent and selective PPAR γ modulator after functional group manipulations.



3.3.9 Cadogan–Sundberg Indole Synthesis

The Cadogan–Sundberg indole synthesis, often known as the Cadogan reaction, refers to the deoxygenation of *o*-nitrostyrenes or *o*-nitrostilbenes