General Remarks

Thin-layer chromatography was performed on 250µm silica plates, while column chromatographic purifications were performed on 100-200 mesh silica gel. All amines, boronic acids and sulfonyl chlorides were obtained from Alfa-Aesar and Aldrich. Components for the catalytic systems; Pd(OAc)$_2$, Pd$_2$(dba)$_3$, PdCl$_2$(dpdf), PdCl$_2$(dcpf), and PdCl$_2$(dtbpf), ligands 2-(dicyclohexylphosphino)biphenyl, 2-(di-tert-butylphosphino)biphenyl, 1,1'-bis(diphenylphosphino)ferrocene, (±)-2,2'-(diphenylphosphino)-1,1'-binaphthalene and 2-(dicyclohexylphosphino)-2'-(N,N-dimethylamino)-1,1'-biphenyl, Xanthphos and tri tertiary butyl phosphine were purchased from Strem. All other reagents were obtained from commercial sources and used without further purification. 1,4-Dioxane was distilled over NaBH$_4$ and then stored over Na. Prior to each reaction 1,4-dioxane was freshly distilled. Compound 6-bromo/chloro-2-cyclopropyl-3-(pyridin-3-ylmethyl)quinazolin-4(3H)-one was prepared scheme as described in the literature. $^1$H NMR spectra were collected either at 400 MHz or at 300 MHz and spectra are referenced to residual protio solvent. $^{13}$C NMR spectra were collected either at 100 MHz or at 75 MHz are referenced to the carbon resonance of the deuterated solvent. Spectra were obtained either in deacidified CDCl$_3$ (deacidification was performed by percolating the solvent through a bed of solid NaHCO$_3$ and basic alumina) or in DMSO-$d_6$ (see specific compound descriptions below). High resolution mass spectrometry was performed at the Mass Spectrometry Laboratory at GVK Biosciences Pvt Ltd. LC-MS analyses were performed with electro spray ionization (ESI), and operated in the positive ion mode. LC analysis was performed using a diode array detector.