Supplementary Material

Second Generation Analogs of the Cancer Drug Clinical Candidate Tipifarnib for Anti-Chagas Disease Drug Discovery

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4-(3-Chlorophenyl)-6-((4-chlorophenyl)(hydroxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (19). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.95 (d, $J = 1.2$ Hz, 1H), 7.78 (m, 2H), 7.51 (ddd, $J = 1.5$, 1.5, 9.0 Hz, 1H), 7.47 (d, $J = 7.2$ Hz, 1H), 7.41 (m, 2H), 7.35 (dd, $J = 1.5$, 1.5 Hz, 1H), 7.26 (m, 4H), 6.85 (d, $J = 1.5$ Hz, 1H), 6.66 (s, 1H), 3.83 (s, 3H), 3.69 (s, 3H) ESI-MS m/z 490.5 (M + H$^+$) $^+$ MW: 490.4 g/mol. Mono-TFA salt FW: 604.40 g/mol.

4-(phenyl)-6-((4-chlorophenyl)(hydroxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one. TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 7.76 (dd, 1H), 7.70 (d, 1H), 7.63 (s, 1H), 7.46 (m, 3H), 7.38 (d, $J = 2.1$ Hz 1H), 7.31 (m, 4H), 7.20 (m, 2H), 6.94 (d, $J = 0.6$ Hz 1H), 6.63 (s, 1H), 3.83 (s, 3H), 3.44 (s, 3H) ESI-MS m/z 457.0 (M + H$^+$)$^+$ MW: 455.94 g/mol.

4-(phenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (10) 6.5 mg (0.014 mmols) of the previous compound was dissolved in 10 mL of MeOH and 6.5 mg tosic acid was added. The reaction was heated to reflux for 48 hours. One spot by TLC. Solvents were removed under reduced pressure to produce a colorless, oily semi-solid. Product was purified by HPLC using a water-methanol gradient with 0.08% v/v trifluoroacetic acid. 0-5 minutes 20% MeOH, 5-25 minutes 20-65% MeOH, 25-30 minutes 65-100% MeOH. Product elutes at 27.8 minutes. 5.6 mg (0.0096 mmols) produced as a mono-TFA salt. Yield 67%. TLC (CH$_2$Cl$_2$: MeOH 9:1 v/v): $R_f = 0.55$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.00 (s, 1H), 7.80 (dd, 1H), 7.75 (d, 1H), 7.57 (m, 5H), 7.40 (m, 6H), 6.70 (s, 1H), 3.82 (s, 3H), 3.55 (s, 3H) 3.22 (s, 3H) ESI-MS m/z 470.4 (M + H$^+$)$^+$ MW: 469.96 g/mol. Mono-TFA salt FW: 583.99 g/mol.
4-(4-chlorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (11). TLC (CH$_2$Cl$_2$: MeOH 9:1 v/v): $R_f = 0.55$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.00 (s, 1H), 7.83 (dd, $J = 9.0, 2.4$ Hz, 1H), 7.73 (d, $J = 9$ Hz, 1H), 7.62 (d, $J = 1.5$ Hz, 1H), 7.54 (m, 3H), 7.39 (m, 6H), 6.67 (s, 1H), 3.81 (s, 3H), 3.56 (s, 3H) 3.23 (s, 3H) ESI-MS m/z 504.6 (M + H$^+$) MW: 504.41 g/mol. Mono-TFA salt FW: 618.43 g/mol.

4-(3-chlorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (3). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.55$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.01 (s, 1H), 7.85 (dd, $J = 9.1, 2.1$ Hz, 1H), 7.74 (d, $J = 9.0$ Hz 1H), 7.62 (d, $J = 1.5$ Hz, 1H), 7.53 (m, 3H), 7.44 (m, 1H), 7.40 (s, 4H), 7.35 (m, 1H), 6.68 (s, 1H), 3.81 (s, 3H), 3.56 (s, 3H) 3.24 (s, 3H) ESI-MS m/z 504.6 (M + H$^+$) MW: 504.41 g/mol. Mono-TFA salt FW: 618.43 g/mol.

4-(4-Fluorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (12). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.55$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.00 (s, 1H), 7.85 (dd, $J = 8.9, 2.4$ Hz, 1H), 7.74 (d, $J = 9$ Hz 1H), 7.61 (d, $J = 1.2$ Hz, 1H), 7.53 (d, $J = 2.1$ Hz, 1H), 7.43 (m, 6H), 7.28 (m, 2H), 6.65 (s, 1H), 3.81 (s, 3H), 3.56 (m, 3H) 3.23 (s, 3H) ESI-MS m/z 488.5 (M + H$^+$) MW: 487.95 g/mol. Mono-TFA salt FW: 601.98 g/mol.

4-(3-fluorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (6). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.55$; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.96 (s, 1H), 7.79 (dd, $J = 9.0, 2.1$ Hz, 1H), 7.70 (d, $J = 8.7$ Hz 1H), 7.57 (d, $J = 1.5$ Hz 1H), 7.50 (m, 2H), 7.36 (s, 4H), 7.20 (m, 3H), 6.64 (s, 1H), 3.77 (s, 3H), 3.51 (s, 3H) 3.19 (s, 3H) ESI-MS m/z 488.5 (M + H$^+$) MW: 487.95 g/mol. Mono-TFA salt FW: 601.98 g/mol.

4-(2-fluorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (9). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $[R_f = 0.55$; $^1$H
NMR (300 MHz, CD$_3$OD, δ): 8.97 (m, 1H), 7.75 (m, 2H), 7.56 (m, 2H), 7.40-7.15 (m, 8H), 6.66 (s, 1H), 3.77 (s, 3H), 3.49 (m, 3H) 3.16 (s, 3H) ESI-MS m/z 488.5 (M + H$^+$)$^+$ MW: 487.95 g/mol. Mono-TFA salt FW: 601.98 g/mol.

4-(4-Methylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (13). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.85 (s, 1H), 7.78 (dd, $J$ = 9.0, 1.2 Hz, 1H), 7.68 (d, $J$ = 9.0 Hz, 1H), 7.56 (d, $J$ = 2.1 Hz, 1H), 7.50 (d, $J$ = 1.5 Hz, 1H), 7.35 (s, 4H), 7.30 (d, $J$ = 7.8 Hz, 2H), 6.59 (s, 1H), 3.77 (s, 3H), 3.49 (s, 3H), 3.18 (s, 3H) ESI-MS m/z 484.6 (M + H$^+$)$^+$ MW: 483.99 g/mol. Mono-TFA salt FW: 598.01 g/mol.

4-(3-Methylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (7). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.96 (s, 1H), 7.77 (dd, $J$ = 9.0, 2.1 Hz, 1H), 7.68 (d, $J$ = 9.0 Hz, 1H), 7.55 (m, 2H), 7.34 (m, 7H), 7.14 (m, 2H), 6.59 (s, 1H), 3.76 (s, 3H), 3.50 (s, 3H) 3.17 (s, 3H) ESI-MS m/z 484.5 (M + H$^+$)$^+$ MW: 483.99 g/mol. Mono-TFA salt FW: 598.01 g/mol.

4-(2-Methylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (4). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.94 (s, 1H), 7.74 (m, 2H), 7.50 (m, 1H), 7.34 (m, 7H), 7.13 (m, 1H), 7.07 (m, 1H), 6.56 (s, 1H), 3.79 (s, 3H), 3.48 (m, 3H) 3.13 (m, 3H) 1.95 (m, 3H) ESI-MS m/z 484.5 (M + H$^+$)$^+$ MW: 483.99 g/mol. Mono-TFA salt FW: 598.01 g/mol.

4-(2,6-Dimethylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (14). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.97 (s, 1H), 7.81 (d, $J$ = 9.0 Hz, 2.1 Hz, 1H), 7.73 (d, $J$ = 9.0 Hz, 1H), 7.50 (d, $J$ = 1.5 Hz, 1H), 7.31 (m, 5H), 7.17 (m, 2H), 6.97 (d, $J$ = 2.1 Hz, 1H), 6.55 (s, 1H), 3.82 (s, 3H), 3.50 (s, 3H) 3.14 (s, 3H), 1.94 (m, 6H) ESI-MS m/z 498.5 (M + H$^+$)$^+$ MW: 498.02 g/mol. Mono-TFA salt FW: 612.04 g/mol.
4-(3,5-Dimethylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (17). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.01 (s, 1H), 7.83 (dd, $J$ = 9 Hz, 2.1 Hz, 1H), 7.73 (d, $J$ = 9 Hz, 1H), 7.60 (m, 2H), 7.39 (m, 4H), 7.17 (s, 1H), 6.99 (m, 2H), 6.62 (s, 1H), 3.81 (s, 3H), 3.56 (s, 3H), 3.23 (s, 3H), 2.39 (s, 6H) [ESI-MS m/z 518.6 (M + H$^+$)$^+$] MW: 498.02 g/mol. Mono-TFA salt FW: 612.04 g/mol.

4-(3-Trifluoromethylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (8). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.97 (s, 1H), 7.78 (m, 6H), 7.61 (s, 1H), 7.49 (d, $J$ = 2.1 Hz, 1H), 7.39 (s, 4H), 6.73 (s, 1H), 3.83 (s, 3H), 3.54 (s, 3H) 3.22 (s, 3H) ESI-MS m/z 538.5 (M + H$^+$)$^+$ MW: 537.96 g/mol. Mono-TFA salt FW: 651.98 g/mol.

4-(2-Trifluoromethylphenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (5). This compound was prepared as for analogous compounds but with the following modification. Coupling of 2-trifluoromethylbenzylbromide to the Weinreb amide via was done at 0 °C in ether as solvent. TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.97 (m, 1H), 7.80 (m, 5H), 7.48 (m, 1H), 7.34 (m, 5H), 7.35 (m, 5H), 6.96 (m, 1H), 6.65 (s, 1H), 3.83 (s, 3H), 3.50 (m, 3H) 3.14 (m, 3H) ESI-MS m/z 538.4 (M + H$^+$)$^+$ MW: 537.96 g/mol. Mono-TFA salt FW: 651.98 g/mol.

4-(3-Chlorophenyl)-6-((β-naphthyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (18). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.62 (s, 1H), 7.82 (m, 4H), 7.71 (dd, $J$ = 8.7, 2.1 Hz, 1H), 7.55 (m, 3H), 7.47 (d, $J$ = 9.0 Hz, 1H), 7.40 (m, 2H), 7.33 (m, 3H), 7.18 (d, $J$ = 7.5 Hz, 1H), 6.72 (s, 1H), 3.77 (s, 3H), 3.52 (s, 3H) ESI-MS m/z 520.5 (M + H$^+$)$^+$ MW: 520.02 g/mol. Mono-TFA salt FW: 634.04 g/mol.
4-(2,6-Dichlorophenyl)-6-((4-chlorophenyl)(methoxy)(1-methyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (15). TLC (CH$_2$Cl$_2$: MeOH 9:1 v/v): $R_f = 0.55$; 
$^1$H NMR (300 MHz, CD$_3$OD, δ): 8.99 (s, 1H), 7.82 (dd, $J = 9.0$, 1.8 Hz, 1H), 7.76 (d, $J = 9.0$ Hz, 1H), 7.55 (m, 4H), 7.35 (m, 4H), 6.95 (d, $J = 2.1$ Hz, 1H), 6.66 (s, 1H), 3.83 (s, 3H), 3.53 (s, 3H), 3.18 (s, 3H), ESI-MS m/z 538.6 (M + H$^+$) $^+$ MW: 538.85 g/mol. Mono-TFA salt FW: 652.88 g/mol.

4-(3-Chlorophenyl)-6-((4-chlorophenyl)(methylamino)(1-ethyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (25). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; 
$^1$H NMR (300 MHz, CD$_3$OD, δ): 9.05 (s, 1H), 7.83 (dd, $J = 8.7$, 1.8 Hz, 1H), 7.77 (d, $J = 9.0$ Hz, 1H), 7.45 (m, 10H), 6.70 (s, 1H), 4.10 (q, 2H), 3.84 (s, 3H), 2.20 (s, 3H), 1.15 (t, 3H) ESI-MS m/z 517.5 (M + H$^+$) $^+$ MW: 517.45 g/mol. Bis-TFA salt FW: 745.50 g/mol.

4-(3-Chlorophenyl)-6-((4-chlorophenyl)(amino)(1-ethyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (24). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; 
$^1$H NMR (300 MHz, CD$_3$OD, δ): 8.98 (s, 1H), 7.85 (m, 2H), 7.46 (m, 4H), 7.32 (m, 1H), 7.22 (m, 4H), 7.02 (s, 1H), 6.85 (d, $J = 1.5$ Hz, 1H), 6.68 (s, 1H), 3.97 (m, 2H), 3.84 (s, 3H), 1.27 (t, 3H) ESI-MS m/z 503.3 (M + H$^+$) $^+$ MW: 503.42 g/mol. Bis-TFA salt FW: 731.47.

4-(3-Chlorophenyl)-6-((4-chlorophenyl)(methoxy)(1-ethyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (26). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; 
$^1$H NMR (300 MHz, CD$_3$OD, δ): 9.15 (s, 1H), 7.85 (dd, $J = 9.0$, 2.1 Hz, 1H), 7.75 (d, $J = 9.0$ Hz, 1H), 7.54 (m, 3H), 7.47 (m, 1H), 7.37 (m, 6H), 6.68 (s, 1H), 4.00 (m, 2H), 3.81 (s, 3H), 3.24 (s, 3H), 1.26 (t, 3H) ESI-MS m/z 518.6 (M + H$^+$) $^+$ MW: 518.43 g/mol. Mono-TFA salt FW: 632.46 g/mol.

4-(3-Chlorophenyl)-6-((4-chlorophenyl)(hydroxy)(1-ethyl-1H-imidazol-5-yl)methyl)-1-methylquinolin-2(1H)-one (27). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f = 0.45$; 
$^1$H NMR (300 MHz, CD$_3$OD, δ): 9.09 (s, 1H), 7.84 (dd, $J = 9.0$, 2.1 Hz, 1H), 7.78 (d, $J = 9.0$ Hz, 1H) 7.47 (m, 4H), 7.36 (m, 1H), 7.27 (m, 4H), 6.83 (d, $J = 1.5$ Hz, 1H), 6.68 (s, 1H), 4.13 (m,
2H), 3.85 (s, 3H), 1.35 (t, 3H) ESI-MS m/z 504.6 (M + H\(^+\))\(^+\) MW: 504.41 g/mol. Mono-TFA salt FW: 618.43 g/mol.

**4-(3-Chloro-phenyl)-6-[methoxy-(3-methyl-3H-imidazol-4-yl)-p-tolyl-methyl]-1-methyl-1H-quinolin-2-one (28).** TLC (CH\(_2\)Cl\(_2\):MeOH 9:1 v/v): \(R_i = 0.55; \) \(^1\)H NMR (300 MHz, CD\(_3\)OD, \(\delta\)): 8.98 (s, 1H), 7.85 (dd, \(J = 9.1\) Hz, 2.1 Hz, 1H), 7.73 (d, \(J = 9.0\) Hz, 1H), 7.57-7.52 (m, 3H), 7.50 (d, \(J = 3.2\) Hz 3H), 7.44-7.43 (m, 1H), 7.36-7.33 (m, 1H), 7.28-7.18 (m, 5H), 6.66 (s, 1H), 3.80 (s, 3H), 3.55 (s, 3H) 3.22 (s, 3H), 2.33 (s, 3H) ESI-MS m/z 484.5 (M + H)\(^+\) MW: 483.99 g/mol. Mono-TFA salt FW: 598.01 g/mol.

**4-(3-Chloro-phenyl)-6-[methoxy-(3-methyl-3H-imidazol-4-yl)-(4-trifluoromethylphenyl)-methyl]-1-methyl-1H-quinolin-2-one (29).** TLC (CH\(_2\)Cl\(_2\):MeOH 9:1 v/v): \(R_i = 0.50; \) \(^1\)H NMR (300 MHz, CD\(_3\)OD, \(\delta\)): 9.01 (s, 1H), 7.88 (dd, \(J = 9.0\) Hz, 2.4 Hz, 1H), 7.78- 7.61 (m, 6H), 7.56-7.51 (m, 3H), 7.44-7.43 (m, 1H), 7.38-7.32 (m, 1H), 6.65 (s, 1H), 3.79 (s, 3H), 3.54 (s, 3H) 3.26 (s, 3H) ESI-MS m/z 538.5 (M + H)\(^+\) MW: 537.96 g/mol. Mono-TFA salt FW: 651.98 g/mol.

**4-(3-Chloro-phenyl)-6-[(4-isopropyl-phenyl)-methoxy-(3-methyl-3H-imidazol-4-yl)]-methyl]-1-methyl-1H-quinolin-2-one (30).** TLC (CH\(_2\)Cl\(_2\):MeOH 9:1 v/v): \(R_i = 0.55; \) \(^1\)H NMR (300 MHz, CD\(_3\)OD, \(\delta\)): 9.00 (s, 1H), 7.84 (dd, \(J = 9.1\) Hz, 3.0 Hz, 1H), 7.74 (d, \(J = 9.0\) Hz, 1H), 7.60-7.52 (m, 3H), 7.45-7.43 (m, 1H), 7.37-7.33 (m, 1H), 7.32-7.22 (m, 4H), 6.67 (s, 1H), 3.80 (s, 3H), 3.55 (s, 3H) 3.22 (s, 3H), 2.88 (q, \(J = 3.3\) Hz, 1.8 Hz, 2H), 1.21 (t, \(J = 7.2\) Hz, 3H) ESI-MS m/z 498.5 (M + H)\(^+\) MW: 498.02 g/mol. Mono-TFA salt FW: 612.04 g/mol.

**4-(3-Chloro-phenyl)-6-[(4-isopropyl-phenyl)-methoxy-(3-methyl-3H-imidazol-4-yl)]-methyl]-1-methyl-1H-quinolin-2-one (31).** TLC (CH\(_2\)Cl\(_2\):MeOH 9:1 v/v): \(R_i = 0.55; \) \(^1\)H NMR (300 MHz, CD\(_3\)OD, \(\delta\)): 8.98 (s, 1H), 7.84 (dd, \(J = 9.3\) Hz, 2.4 Hz, 1H), 7.73 (d, \(J = 9.0\) Hz, 1H), 7.58-7.51 (m, 4H), 7.46-7.44 (m, 1H), 7.34-7.24 (m, 5H), 6.68 (s, 1H),...
3.83(s, 3H), 3.55 (s, 3H) 3.23 (s, 3H), 2.58-2.55 (m, 1H), 1.20 (d, J = 6.9 Hz, 6H) ESI-MS m/z 512.6 (M + H)^+ MW: 511.20 g/mol. Mono-TFA salt FW: 626.07 g/mol.

4-Biphenyl-3-yl-6-[(4-chloro-phenyl)-methoxy-(3-methyl-3H-imidazol-4-yl)-methyl]-1-methyl-1H-quinolin-2-one (32). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 8.95 (s, 1H), 7.85-7.70 (m, 3H), 7.69-7.53 (m, 6H), 7.52- 7.48 (m, 2H), 7.45-7.32 (m, 4H), 7.25 (d, J = 9.0 Hz, 2H), 6.66 (s, 1H), 4.06 (s, 2H), 3.83 (s, 3H), 3.51 (s, 3H) 3.21 (s, 3H) ESI-MS m/z 546.6 (M + H)^+ MW: 546.06 g/mol. Mono-TFA salt FW: 660.08 g/mol.

4-(3-Benzyl-phenyl)-6-[(4-chloro-phenyl)-methoxy-(3-methyl-3H-imidazol-4-yl)-methyl]-1-methyl-1H-quinolin-2-one (33). TLC (CH$_2$Cl$_2$:MeOH 9:1 v/v): $R_f$ = 0.55; $^1$H NMR (300 MHz, CD$_3$OD, δ): 9.02 (s, 1H), 7.73 (dd, J = 6.6 Hz, 3.0 Hz, 1H), 7.66 (d, J = 12.0 Hz, 1H), 7.58 (dd, J = 4.5 Hz, 3.0 Hz, 2H), 7.50-7.38 (m, 2H), 7.37-7.20 (m, 11H), 6.61 (s, 1H), 4.06 (s, 2H), 3.78 (s, 3H), 3.51 (s, 3H) 3.24 (s, 3H) ESI-MS m/z 560.6 (M + H)^+ MW: 560.08 g/mol. Mono-TFA salt FW: 674.11 g/mol.
1/C4/03 MeOD m/z = 518, Methyl ether of JR-4