Supporting Information*

General

Melting points are uncorrected. The IR spectra of solids (potassium bromide) were recorded on a Perkin Elmer FTIR paragon 1000 spectrophotometer. The ^{1}H and ^{13}C NMR spectra were recorded on a Bruker AC-200 (200 MHz) instrument in deuteriochloroform and chemical shifts (δ) are expressed in ppm relative to TMS as an internal standard. Ascending TLC was performed on precoated plates of silica gel 60 F 254 (Merck) and the spots visualized using an ultraviolet lamp or iodine vapor. E. Merck silica gel 60 F (70-300 mesh) was used for column chromatography. The elemental analyses were carried out by the microanalysis laboratory of INSA at Rouen, F 76130 Mont. Saint. Aignan, France. MS spectral measurements were carried out on a AEI MS 902 S spectrometer (70 eV, electron impact).

Experimental procedures

General procedure for *S*-alkylation of substituted thiophenols: Synthesis of imides **1a,b,c**. To a cooled and stirred solution of substituted thiophenols (10 mmol) in dry DMF (20 mL) was added solid sodium methylate (0.54 g, 10 mmol). After stirring for 30 minutes, *N*-chloromethylphthalimide (1.63 g, 8.34 mmol) in same solvent (10 mL) was added slowly dropwise over a period of 10 minutes. The mixture was then stirred at rt for 5 h under a nitrogen atmosphere and poured into ice-water. The resulting white precipitate was filtered, dried and then recrystallized from ethanol to give the expected imides **1a,b,c**.

N-(Phenylthiomethyl)phthalimide 1a: This product was obtained as a white solid in 90% yield; mp 128°C (litt 126-127°C petroleum ether);[1] EIMS m/z 269 (M^+); IR (KBr): ν 1715 (C=O) cm^{-1}; ^{1}H NMR ($CDCl_3$, 200.13 MHz) δ 5.03 (s, 2H, CH_2-S), 7.24-7.28 (m, 3H, Aromatic), 7.46-7.49 (m, 2H, Aromatic), 7.61-7.69 (m, 2H, Phthalimide), 7.78-7.82 (m, 2H, Phtalimide). Anal. Calcd. For $C_{15}H_{11}NO_2S$ (269.32): C, 66.89; H, 4.11; N, 5.20. Found: C, 66.83; H, 3.97; N, 5.19.

N-(2-Bromophenylthiomethyl)phthalimide 1b: This product was obtained as a white solid in 82% yield; mp 97°C; EIMS m/z 348 (M^+); IR (KBr): ν 1710 (C=O) cm^{-1}; ^{1}H NMR ($CDCl_3$, 200.13 MHz) δ 5.06 (s, 2H, CH_2-S), 7.11-7.18 (m, 2H, Aromatic), 7.53-7.65 (m, 2H, Aromatic), 7.66-7.74 (m, 2H, Phthalimide), 7.78-7.85 (m, 2H, Phthalimide). Anal. Calcd. For $C_{15}H_{10}BrNO_2S$ (348.21): C, 51.74; H, 2.89; N, 4.02. Found: C, 51.63; H, 2.91; N, 3.97.

N-(2-Naphtylylthiomethyl)phthalimide 1c: This product was obtained as a white needles in 94% yield; mp 119°C (litt 120-121°C petroleum ether);[1] EIMS m/z 319 (M^+); IR (KBr): ν 1718 (C=O) cm^{-1}; ^{1}H NMR ($CDCl_3$, 200.13 MHz) δ 5.14 (s, 2H, CH_2-S), 7.41-7.45 (m, 2H, Aromatic), 7.55-7.59 (m, 2H, Aromatic), 7.66-7.69 (m, 2H, Phthalimide), 7.74-7.79 (m, 4H, Phthalimide and Aromatic), 7.96 (d, *J*=1.2 Hz, 1H,

[1] M.Uchino, M.Sekiya, *Chem. Pharm. Bull.*, 1980, **28**, 126

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Aromatic). Anal. Calcd. For $C_{19}H_{13}NO_2S$ (319.38): C, 71.45; H, 4.10; N, 4.38. Found: C, 71.36; H, 4.03; N, 4.41.

General procedure for the synthesis of ω-benzyl-ω-carbinol lactams **2a,b,c**. To a stirred solution of *N*-alkylated imides **1a,b,c** (10 mmol) in mixture of dry CH_2Cl_2/Et_2O (3/2) was added dropwise benzylmagnesium chloride (15 to 20 mmol) over a period of 10 minutes (prepared by classical procedure from anhydrous magnesium and benzyl chloride in dry diethyl ether). After 3 h of reaction at rt, the reaction mixture was poured into a solution of 10% NH_4Cl (20 mL) and decanted. After a classical work up, the resulting solid was purified by recrystallization from dry ethanol to give the expected ω-benzyl-ω-carbinol lactams **2a,b,c**.

3-Benzyl-2,3-dihydro-3-hydroxy-2-(phenylthiomethyl)-1H-isoindol-1-one 2a: This product was obtained as a white yellow solid in 51% yield; mp 133°C; EIMS m/z 361 (M^+); IR (KBr): ν 3314 (O-H), 1678 (C=O) cm^{-1}; ^1H NMR ($CDCl_3$, 200.13 MHz) δ 3.05 (s, 1H, OH exchangeable with D_2O), 3.09 (d, 1H, *J*=14.1 Hz, CH_2), 3.08 (d, 1H, *J*=14.1 Hz, CH_2), 4.78 (d, 1H, *J*=13.5 Hz, N-CH_2-S), 5.16 (d, 1H, *J*=13.5 Hz, N-CH_2-S), 6.90-6.95 (m, 2H, Aromatic), 7.11-7.15 (m, 4H, Aromatic), 7.23-7.28 (m, 3H, Aromatic); 7.38-7.42 (m, 2H, Aromatic and Isoindole), 7.55-7.59 (m, 3H, Isoindole). Anal. Calcd. For $C_{22}H_{19}NO_2S$ (361.46): C, 73.10; H, 5.29; N, 3.87. Found: C, 72.94; H, 5.38; N, 3.96.

3-Benzyl-2-(2-bromophenylthiomethyl)-2,3-dihydro-3-hydroxy-1H-isoindol-1-one 2b: This product was obtained as a yellow solid in 61% yield; mp 130°C; EIMS m/z 440 (M^+); IR (KBr): ν 3291 (O-H), 1677 (C=O) cm^{-1}; ^1H NMR ($CDCl_3$, 200.13 MHz) δ 3.03 (s, 1H, OH exchangeable with D_2O), 3.13 (d, 1H, *J*=14 Hz, CH_2), 3.57 (d, 1H, *J*=14 Hz, CH_2), 4.84 (d, 1H, *J*=13.7 Hz, N-CH_2), 5.23 (d, 1H, J= *J*=13.7 Hz, N-CH_2), 6.90-7.96 (m, 2H, Aromatic), 7.11-7.15 (m, 5H, Aromatic), 7.27 (t, 1H, *J*=7.8 Hz, Isoindole), 7.39-7.43 (m, 2H, Aromatic), 7.56 (d, 1H, *J*=7.8 Hz, Isoindole), 7.60-7.64 (t, 1H, *J*=7.8 Hz, Isoindole), 7.68-7.73 (d, 1H, *J*=7.8 Hz, Isoindole). Anal. Calcd. For $C_{22}H_{18}BrNO_2S$ (440.35): C, 60.01; H, 4.12; N, 3.18. Found: C, 59.87; H, 4.17; N, 3.12.

3-Benzyl-2,3-dihydro-3-hydroxy-2-(naphthylthiomethyl)-1H-isoindol-1-one 2c: This product was obtained as a yellow solid in 73% yield; mp 80°C (decomposition); EIMS m/z 411 (M^+); IR (KBr): ν 3314 (O-H), 1672 (C=O) cm^{-1}; ^1H NMR ($CDCl_3$, 200.13 MHz) δ 3.03 (s, 1H, OH exchangeable with D_2O), 3.13 (d, 1H, *J*=14 Hz, CH_2), 3.58 (d, 1H, *J*=14 Hz, CH_2), 4.89 (d, 1H, *J*=13.5 Hz, N-CH_2), 5,28 (d, 1H, *J*=13.5 Hz, N-CH_2), 6.91-6.98 (m, 2H, Benzene), 7.01-7.05 (m, 1H, Naphthalene), 7,11-7.18 (m, 3H, Benzene), 7.39-7.42 (m, 5H, Naphthalene), 7.60-7.66 (m, 2H, Isoindole), 7.72-7.77 (m, 2H Isoindole). Anal. Calcd. For $C_{26}H_{21}NO_2S$ (411.52): C, 75.88; H, 5.14; N, 3.40. Found: C, 75.82; H, 5.11; N, 3.35.

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