

Attachment 10c: BLR for Cytotoxicity evaluations

IC 50 values in micromolar

| <i>Phase I chemicals</i> | | rep 1 | rep 2 | rep 3 | GEOMEAN |
|-----------------------------|------------|--------|--------|---------|-----------------|
| 2,4-Dinitrochlorobenzene | GIV | 10.99 | 9.16 | 10.11 | 10.06 |
| | Lab1 | 6.19 | 3.95 | 11.71 | 6.59 |
| | Lab2 | 10.44 | 7.46 | 11.23 | 9.57 |
| | Lab3 | 7.02 | 7.59 | 11.47 | 8.48 |
| | Lab4 | 12.68 | 12.61 | 12.30 | 12.53 |
| Chlorobenzene | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Citral | GIV | 107.67 | 100.29 | 102.77 | 103.53 |
| | Lab1 | 170.91 | 122.19 | 193.55 | 159.30 |
| | Lab2 | 212.06 | 209.89 | 113.87 | 171.78 |
| | Lab3 | 177.25 | 167.99 | 156.01 | 166.85 |
| | Lab4 | 249.47 | 241.00 | 226.64 | 238.85 |
| Ethylene glycol dimethacryl | GIV | 932.57 | 853.68 | 943.78 | 909.11 |
| | Lab1 | 667.39 | 639.17 | 1597.15 | 879.92 |
| | Lab2 | 897.54 | >2000 | 846.23 | 871.51 |
| | Lab3 | 825.58 | 783.50 | 1381.68 | 963.24 |
| | Lab4 | >2000 | >2000 | 1770.18 | 1770.18 |
| Hexyl cinnamic aldehyde | GIV | 37.48 | 29.57 | 26.68 | 30.92 |
| | Lab1 | 24.49 | 39.66 | 62.32 | 39.27 |
| | Lab2 | 24.82 | 47.92 | 25.30 | 31.11 |
| | Lab3 | 51.11 | 50.52 | 95.35 | 62.67 |
| | Lab4 | 83.93 | 92.34 | 96.77 | 90.85 |
| Methyl salicylate | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Sulfanilamide | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |

Phase II chemicals

| | | | | | |
|---------------------------|------------|---------|---------|---------|-----------------|
| 4-Phenylenediamine | GIV | 399.98 | 380.32 | 422.93 | 400.70 |
| | Lab1 | 392.86 | 397.28 | 399.12 | 396.41 |
| | Lab2 | 736.41 | 662.35 | 394.21 | 577.18 |
| | Lab3 | 447.39 | 704.25 | 867.33 | 648.93 |
| | Lab4 | 192.22 | 464.55 | 872.11 | 427.04 |
| Cinnamic aldehyde | GIV | 168.10 | 135.40 | 194.14 | 164.10 |
| | Lab1 | 103.52 | 219.66 | 226.32 | 172.65 |
| | Lab2 | 143.92 | 109.24 | 148.25 | 132.59 |
| | Lab3 | 219.87 | 435.40 | 443.48 | 348.86 |
| | Lab4 | 108.00 | 111.52 | 120.19 | 113.12 |
| 4-nitrobenzylbromide | GIV | 6.55 | 5.38 | 10.44 | 7.16 |
| | Lab1 | 1.74 | 11.70 | 9.27 | 5.73 |
| | Lab2 | 8.88 | 11.43 | 25.30 | 13.69 |
| | Lab3 | 7.43 | 13.20 | 12.96 | 10.83 |
| | Lab4 | 6.18 | 6.02 | 15.23 | 8.28 |
| 4-Methylaminophenol sulph | GIV | 83.08 | 29.95 | 58.89 | 52.72 |
| | Lab1 | 14.65 | 46.77 | 46.83 | 31.77 |
| | Lab2 | 54.36 | 54.17 | 52.32 | 53.61 |
| | Lab3 | 106.74 | 139.97 | 172.12 | 137.00 |
| | Lab4 | 9.87 | 26.19 | 53.56 | 24.01 |
| Isoeugenol | GIV | 474.89 | 540.11 | 651.95 | 550.93 |
| | Lab1 | 248.47 | 891.90 | 794.81 | 560.55 |
| | Lab2 | 810.42 | 805.25 | 1521.00 | 997.53 |
| | Lab3 | 704.70 | 905.34 | 777.64 | 791.65 |
| | Lab4 | 393.62 | 479.57 | 726.73 | 515.74 |
| Eugenol | GIV | 1333.60 | 1329.46 | 1428.75 | 1363.18 |
| | Lab1 | 961.32 | 1690.36 | 1294.71 | 1281.37 |
| | Lab2 | 1506.72 | 1486.58 | >2000 | 1496.62 |
| | Lab3 | 1519.99 | 1454.95 | >2000 | 1487.12 |
| | Lab4 | 1509.57 | 1511.74 | 1594.15 | 1537.99 |
| Oxazolone | GIV | >2000 | 1667.77 | >2000 | >2000 |
| | Lab1 | 1646.15 | 1723.55 | 1924.76 | 1760.99 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |

| | | | | | |
|------------------------------|------------|---------|---------|---------|-----------------|
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | 492.56 | 477.90 | 2000.00 | 777.93 |
| 2-Mercaptobenzothiazole | GIV | 933.77 | 943.67 | 1079.30 | 983.41 |
| | Lab1 | 774.09 | 1281.81 | 1339.93 | 1099.59 |
| | Lab2 | 1513.20 | 1642.73 | >2000 | 1576.64 |
| | Lab3 | 1548.76 | >2000 | 1770.77 | 1656.05 |
| | Lab4 | 1208.14 | 1690.58 | >2000 | 1429.15 |
| (5-chloro)-Methylisothiazoli | GIV | 75.62 | 13.35 | 34.33 | 32.61 |
| | Lab1 | 3.90 | 15.31 | 11.85 | 8.91 |
| | Lab2 | 25.44 | 25.31 | 25.98 | 25.57 |
| | Lab3 | 11.42 | 11.42 | 23.35 | 14.50 |
| | Lab4 | 9.78 | 9.91 | 21.42 | 12.76 |
| Sodium lauryl sulfate | GIV | 62.47 | 51.40 | 57.75 | 57.02 |
| | Lab1 | 55.23 | 84.88 | 88.18 | 74.49 |
| | Lab2 | 43.03 | 44.42 | 84.57 | 54.47 |
| | Lab3 | 45.41 | 48.29 | 45.11 | 46.25 |
| | Lab4 | 90.72 | 86.83 | 96.08 | 91.13 |
| Salicylic acid | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Imidazolidinyl urea | GIV | 94.57 | 91.24 | 92.26 | 92.68 |
| | Lab1 | 60.91 | 89.92 | 95.19 | 80.49 |
| | Lab2 | 95.26 | 104.63 | 196.83 | 125.19 |
| | Lab3 | 105.28 | 97.77 | 106.19 | 103.01 |
| | Lab4 | 95.54 | 93.79 | 94.81 | 94.71 |
| Methyldibromo glutaronitrile | GIV | 38.66 | 24.53 | 43.05 | 34.43 |
| | Lab1 | 18.61 | 29.75 | 27.27 | 24.72 |
| | Lab2 | 50.19 | 52.58 | 57.96 | 53.48 |
| | Lab3 | 42.73 | 41.44 | 46.55 | 43.52 |
| | Lab4 | 40.58 | 24.73 | 32.11 | 31.82 |
| Glyoxal | GIV | 607.13 | 630.18 | 594.67 | 610.49 |
| | Lab1 | 364.57 | 684.61 | 573.82 | 523.20 |
| | Lab2 | 693.99 | 689.79 | 785.81 | 721.88 |
| | Lab3 | >800 | >800 | >800 | >800 |
| | Lab4 | 704.80 | 696.02 | >800 | 700.40 |
| Glycerol | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Diethyl phthalate | GIV | >2000 | >2000 | 1879.05 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Isopropanol | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Cinnamyl alcohol | GIV | 2000.00 | 1566.03 | 1583.46 | 1705.34 |
| | Lab1 | 2000.00 | 1996.22 | 1288.61 | 1726.32 |
| | Lab2 | 1870.04 | 1757.57 | 1857.83 | 1827.78 |
| | Lab3 | 1991.57 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| Lactic acid | GIV | >2000 | >2000 | >2000 | >2000 |
| | Lab1 | >2000 | >2000 | >2000 | >2000 |
| | Lab2 | >2000 | >2000 | >2000 | >2000 |
| | Lab3 | >2000 | >2000 | >2000 | >2000 |
| | Lab4 | >2000 | >2000 | >2000 | >2000 |
| tetramethylthiuramdisulfide | GIV | 22.94 | 22.98 | 25.68 | 23.83 |
| | Lab1 | 46.80 | 23.59 | 17.39 | 26.78 |
| | Lab2 | 54.57 | 53.65 | 52.85 | 53.68 |
| | Lab3 | 27.03 | 47.01 | 38.65 | 36.62 |
| | Lab4 | 9.78 | 12.35 | 13.74 | 11.84 |
| Phenyl benzoate | GIV | 188.77 | 185.33 | 181.48 | 185.17 |
| | Lab1 | 379.66 | 299.16 | 160.73 | 263.31 |
| | Lab2 | 191.44 | 195.91 | 791.27 | 309.60 |
| | Lab3 | 367.49 | 196.49 | 191.21 | 239.90 |
| | Lab4 | 210.34 | 396.83 | 791.90 | 404.32 |