**WHO Studie Mai 2025 Zusammenfassung Dr med Roman Kuonen Dezember 2025**

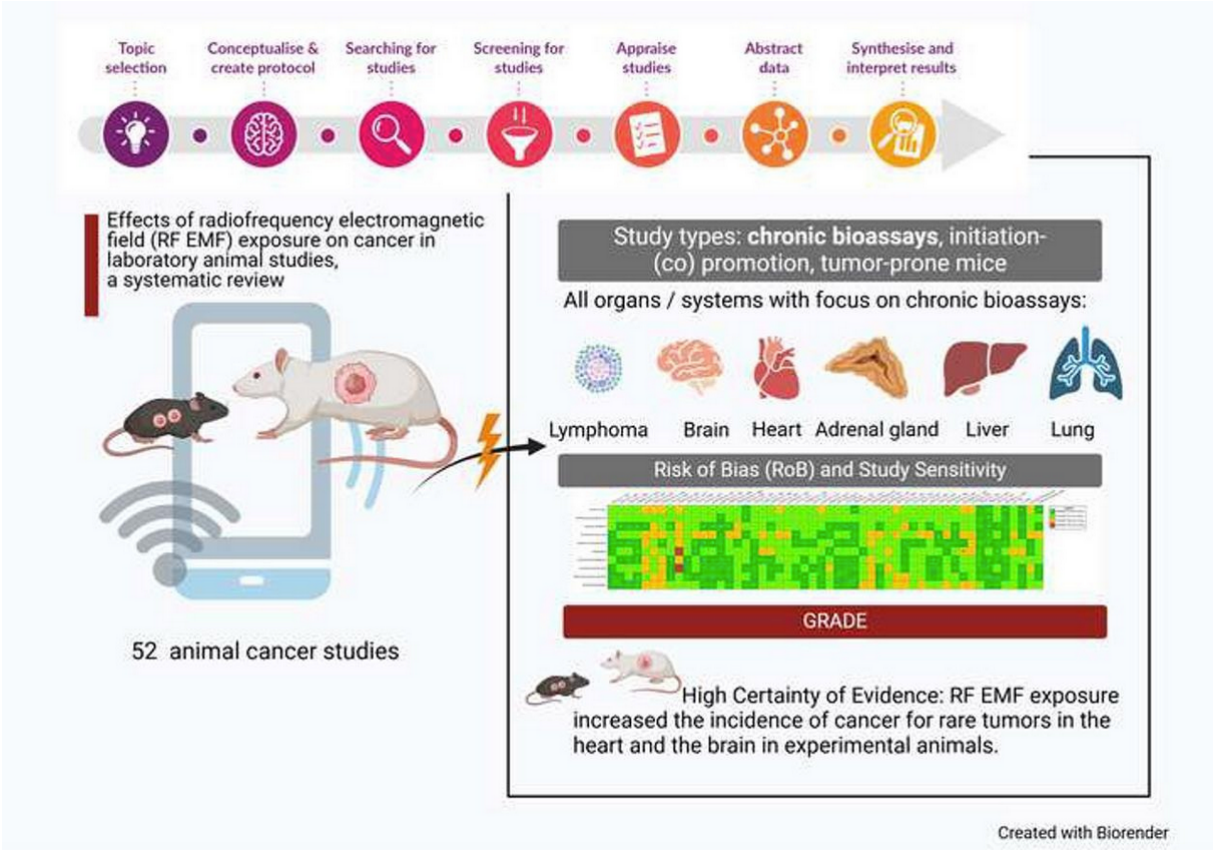
M. Mevissen, A. Ducray, J.M. Ward, A. Kopp-Schneider, J.P. McNamee, A.W. Wood, T.M. Rivero, K. Straif:
Effects of radiofrequency electromagnetic field exposure on cancer in laboratory animal studies, a systematic review, Environment International (2025)

For brain tumors (20 studies), including 5 chronic bioassays (1,902 mice, 6,011 rats), an increase in glial cell-derived neoplasms was reported in two chronic bioassays in male rats. The CoE for an increased risk in **glioma** was judged as high. The BMD analysis was statistically significant for only one study and the BMD was 4.25 (95% CI 2.70, 10.24).

For neoplasms of the heart (4 chronic bioassays with 6 experiments), 3 studies were performed in rats (~2,165 animals), and 1 in mice (~720 animals). Based on 2 bioassays, statistically significant increases in **malignant schwannomas** was judged as high CoE for an increase in heart schwannomas in male rats. The BMDs from the two positive studies were 1.92 (95 %CI 0.71, 4.15) and 0.177 (95 %CI 0.125, 0.241), respectively.

Sixteen studies investigated tumors of the liver with 5 of these being chronic bioassays. The CoE was evaluated as moderate for **hepatoblastomas.**

For neoplasms of the lung (3 chronic bioassays), 8 studies were conducted in rats (~1,296 animals) and 23 studies in mice (~2,800 animals). In one chronic bioassay, a statistically **significant positive trend was reported for bronchoalveolar adenoma or carcinoma (combined)**, which was rated as moderate CoE for an increase in lung neoplasms with some evidence from 2 initiation-(co–)promotion studies.




**We note that the two tumor types with high CoE in animals in this systematic review are the same as those identified with limited evidence in humans by the IARC Working Group**.
Certainty of the evidence (CoE) = Sicherheit der Beweise