

Table 1

Studies on the effects of glyphosate and/or its commercial formulations in humans.

Type of Study	Toxic Agent	Exposure Mode/Objectives	Results	Reference
Transversal study	GBH	Occupational exposure	<ul style="list-style-type: none">- Positive association between GBH exposure and visual memory impairment	[45]
Prospective cohort study	GBH	Not specified	<ul style="list-style-type: none">- ↑ in S100B protein levels in patients with neurological complications- S100B protein was a predictor of neurological complications in GLY-poisoned patients	[46]
Population-based case-control study	GBH	Occupational exposure	<ul style="list-style-type: none">- Prenatal and infant exposure increases the risk of autism spectrum disorder- Exposure during childhood appears to increase the risk of developing more severely impaired phenotypes with comorbid intellectual disability	[47]
Cohort study	GBH	Occupational exposure	<ul style="list-style-type: none">- GBHs were associated with lower toxicity to farmers' health compared to other non-GBHs	[48]
Cohort study	GBH	Occupational exposure	<ul style="list-style-type: none">- No relationship was found between GBH use and peripheral nerve conduction abnormalities in farmers	[49]

Abbreviations: GBH, glyphosate-based herbicide; ↑, increase; S100B, S100 calcium-binding protein B; GLY, glyphosate; iPSCs, induced pluripotent stem cells; AMPA, aminomethylphosphonic acid; BBB, blood–brain barrier; ↓, decrease; LDH, lactate dehydrogenase; MDA, malondialdehyde; NO, nitric oxide; ROS, reactive oxygen species; IL-6, interleukin-6; TNF-α, tumor necrosis factor alpha; CAMK2, Ca²⁺/calmodulin-dependent protein kinase 2.