

# Diffuse Damage in Traumatic Brain Injury and Its Large-Spectrum Implications: Keys on Diffuse Axonal Injury and Indirect Traumatic Optic Neuropathy for Major Eye Diseases. Revisiting the “Eye-Brain Axis”

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## Abstract

Diffuse damage is a key characteristic of alpha emitters when they cause internal contamination, because their alpha charge keeps them away from each other, giving birth to “grid” patterns in the brain. The effect was already shown to be characteristic of traumatic brain injury. The push effect of the positive charges onto other positive charges (reverse magnet effect) leads to many comorbidities altogether with the main disease caused by them, beyond TBI. The study of the “eye-brain axis” is a large provider of cases of such comorbidities. The review of eye diseases and their relation with TBI or related diseases, especially thyroid diseases, was done to determine whether they are related or not to this grid effect. The results show that more diseases than what was known until now are found to be dependent on contamination with alpha emitters.

**Keywords:** Traumatic brain injury, diffuse axonal injury, indirect traumatic optic neuropathy, autism, schizophrenia, myopia, cataract, glaucoma, astigmatism, thyroid diseases, Graves’ Disease, refractory depression, strabismus, optic nerve hypoplasia.

## Introduction

The diffuse nature of the damage in traumatic brain injury (TBI), related to the alpha emitters’ positive charge pushing nanoparticulates to adopt a largely scattered pattern because they are repelled by each other, leads typically to a variety of syndromes, and a significant diversity depending on patients. There is also data indicating that this diffuse nature of the damage increases the risks of an unfavourable outcome (reported in [1]). The diffuse nature is intrinsically linked with the nature of traumatic brain injury, typically from inhalation or ingestion of alpha emitters ; subsequent shocks will unveil the latent contamination through e.g. the shearing of tissue inbetween points of contamination by alpha emitters, as alpha decay and the shuriken shape of fertile alpha emitters [2] both open opportunities for tissue ripping, through cell death on the line of shooting of alpha emitters, or around fertile alpha emitters, especially after some solar radiation causing spin of the shuriken alpha emitters. This demultiplies the damage but fertile alpha emitters can also simply be pressed more deeply into the glia and cause more damage later under UV spin.

## Autism and schizophrenia

Autism certainly relates to that pattern, with the diffuse nature (as in TBI) making for various symptoms and a difficulty

sometimes for doctors to define the central elements of autism. A review of the Taiwanese population [3] has shown that children are particularly at risk of autism spectrum disorder, of attention-deficit/hyperactivity disorder, and of developmental delay, after repeated TBI events, severe TBI, and TBI events before 1 year of age. The shaken baby syndrome represents a particularly significant predecessor to autism, ADHD and developmental delay in that perspective. High levels of uranium in serum were found, together with high antimony levels, to be a risk factor for schizophrenia [4], confirming the argument made in [5], and significant concentrations of uranium, together with lead and mercury, were found on the hair of autistic children [6]. Schizophrenia, based on the elements available such as acidic brain pH indicative of the presence of alpha decay, and brain MRIs showing the damage, was found to be highly dependent on alpha emitters and in particular on the deliberate re-uptake by subjects. Schizophrenic subjects may even be defined as harbouring a “sustained traumatic brain injury”, although in schizophrenia there are behaviours of self-continuation of the TBI that explain why we have a different name for this disease. Uranium levels, as well as levels of all other alpha emitters, but in particular fertile alpha emitters (of a shuriken shape) are clearly a cofounder of autism

spectrum disorders [7], of ADHD and of development delay, in particular after baby shaking syndrome, since the shaking demultiplies the effects of shuriken alpha emitters stuck in the brain tissue, causing large scale tissue ripping, opening gaps and allowing also tissue necrosis, as well as of schizophrenia and related diseases.

The diffuse nature of the damage, together with Bose-Einstein condensation [8] around the cortex lobes, with the frontal and temporal lobes being particularly vulnerable to Bose-Einstein condensation, explains clearly the difficulties typically associated with autism spectrum disorders. Uranium levels, as well as levels of all other alpha emitters, but in particular fertile alpha emitters (of a shuriken shape) are clearly a cofounder of autism spectrum disorders, of ADHD and of development delay, in particular after baby shaking syndrome, since the shaking demultiplies the effects of shuriken alpha emitters stuck in the brain tissue, causing large scale tissue ripping, opening gaps and allowing also tissue necrosis. But this may come together with body restraints imposed on the children by the parents or the social entourage, with for instance condemnation of masturbation in Christianity making excretion more difficult, explaining why authoritarian theocratism has been found to be another key factor for autism [7]. Indeed, the contamination around the frontal and, even more, around the temporal lobes, is quite easy to get to fall down (in comparison with the parietal lobes in particular) for excretion, with the pituitary gland being there nearby for spit elimination [9] and in general excretion channels being closer, but collective ideologies condemning some forms of excretion represent a danger to health that shows up in large scale epidemiological data. While the scattered nature of the alpha emitters in the brain imposes something like a grid, that explains the peculiar words, movements, emotional closures of children with autism, the shutting down of some excretion channels by the social environment and familial entourage explains the encroachment of the disease.

### **Diffuse axonal injury, indirect traumatic optic neuropathy and eye diseases**

There is a large bridge between TBI and eye diseases, related to diffuse axonal injury (DAI) and to indirect traumatic optic neuropathy (ITON) in particular, which are both related to diffuse contamination with alpha emitters in the brain. DAI affects in particular the white matter tracts, while ITON affects the nerves serving the eyes. Alpha emitting nanoparticulates passing behind the eyes can cause bright spots or black spots in the eyes, with direct damage causing direct vision losses, in a proportionate way.

As concerns myopia, one review [10] suggests a clear and decisive link with airborne alpha emitters related to industrial pollution in particular, although natural contamination with NORMs, in e.g. granitism, also stands in the way of the fight against myopia. Indeed, the myopia rates are found to be particularly acute among inhabitants of the highly industrialized areas of China, Mongolia is found to have an intermediary rate and Nepal a very low rate ([10] quotes [11] [12] and [13]). Another confirmation is to be found in the stability of rates for

children aged 7-8 years in Finland, while the prevalence rate almost doubled for children aged 14-15 years ([10] quoting [14]). Indeed it is clear that children aged 14-15 are more frequently going outside for reasons of leisure or simply for travelling to schools independently from their parents and are hence more exposed to air pollution, while children aged 7-8 stay frequently in indoor facilities where the granitism is the sole source of alpha emitters, and it is a stable source of pollution. Air pollution, which is the main source of variation, is also the most likely to contaminate the eyes directly and enter the eyeballs or slip just around to cause damage onto them and produce, through the bystander effect, the cell proliferation around the eyeballs that leads to the elongated shape typical of myopia.

Regarding astigmatism, data in [15] also suggests similar results, with very high rates in adults in South-East Asia, and the summary in [16] allows to firmly assess that astigmatism, as above, is linked to airborne pollution with alpha emitters contaminating the eyeballs, with air pollution being clearly the key factor in the variations observed.

As concerns cataract, the pattern of Bose-Einstein condensation around the eye, and leaks caused by alpha decay allowing humidity to penetrate within the eye, is a solid pattern explaining the disease, and there is data supporting that. Indeed it is found [17] [18] that South-East Asia has the most important cataract rates. This is consistent with the earlier findings. Glaucoma is also clearly related with traumatic brain injury, as its central feature is optic nerve degeneration and indirect optic traumatic neuropathy opens the way to that. Both indirect traumatic optic neuropathy [19] and diffuse axonal injury [20] [21] have been shown to prepare the terrain for glaucoma. Axonal degeneration is explained by the progressive increase in activity level of natural alpha emitters, following the “timebomb” principle. Cataract and glaucoma are also listed as the most frequent ionizing radiation-induced diseases together with optic neuropathy, retinopathy and angiopathy in [22]. A significant case emerged in the news when the 49-years-old head of a uranium mining company in Australia found himself with glaucoma and called for people to get tested [23].

### **Hypothyroidism, hyperthyroidism and eye diseases**

Hypopituitarism and the associated hypothyroidism have been found to be common with severe traumatic brain injury [24]. Alterations of vision can occur with hypothyroidism, a disease that appears sometimes as psychosis, with 52% of patients of refractory depression found to have subclinical hypothyroidism in a group of studies, as opposed to 8-17% in unselected depression patients [25]. A deficit in visuoperceptual skills can also result from hypothyroidism. The contamination of the adenohypophysis (anterior pituitary gland in the brain) by alpha emitters and alpha decay onto it can interfere strongly with its secretion of the thyroid-stimulating hormone TSH and result in hypothyroidism. Direct damage on the thyroid, related to internal contamination with alpha emitters can also result in hypothyroidism if the damage is sustained and there is no self-regeneration of the body with stem cells and the

endocannabinoid metabolism not supporting their migration to damaged areas. This can occur with traumatic brain injury, and the relatively high frequency of the event can be linked to the closeness of the pituitary with the oral tract, and the facility of Bose-Einstein condensation around it, explaining the observed frequency in refractory depression, a disease in which the mood disturbances result certainly from internal contamination with alpha emitters as in TBI, and endocrine disruption from the contamination affecting hormone production rates strongly.

Hyperthyroidism can also result from a more limited contamination around the pituitary or the thyroid itself causing the thyroid to increase in size out of inflammation, and in particular of the proliferation of its cells because of the bystander effect (see [26]). This explains very well the pattern of the Graves' disease, with the swelling around eyes explained as well by the bystander effect of a contamination with alpha emitters around the eyes, altogether with, in Graves' ophthalmopathy, pressure or pain in the eyes, double vision (with the pressure of alpha emitters pushing sometimes, with alpha decay, the retina), dry eye and difficult moving of the eyes. The alpha activity behind the eyes creates the supplement of pressure and of nerve damage that can evolve toward blindness.

### Eye diseases in autism and schizophrenia

There are also eye problems with autism: strabismus may concern 41% of autistic children according to a study where 52% of ASD children were found to have an ocular abnormality [27]. Children on the autistic spectrum "will frequently have an ophthalmologic abnormality" [28]. Autism spectrum disorders were found to have a very high prevalence in blind children [29]. High prevalence of eye disorders in ASD children is extremely logical in relation with the diffuse nature of the alpha emitters that are the cause of autism and the easiness for some alpha emitters to get stuck just behind the eyes when some alpha emitters are on the frontal lobe and others on the temporal lobe. It also seems that there is a natural behaviour of self-protection with strabismus – since the child reacts to an environment of social pressure, having an eye watching outside all the time is about securing more opportunities to move or to escape to people they face ; or alternatively knowing earlier who comes to them, to better develop strategies of self-protection. In autistic patients, hypothalamic dysfunction can result in loss of regulation over the pituitary gland and damage on that gland, related to alpha emitters in internal contamination in the brain, it can explain hence the associated hypopituitarism, which is present in 75% to 80% of patients with optic nerve hypoplasia, a disease closely associated with autism [30].

As concerns schizophrenia, "there are multiple structural and physiological disturbances of the eye associated with schizophrenia, all of which could contribute to the visual processing impairments, and altered visual experiences found in the disorder" [31] – the disturbances found by the authors correspond with alpha emitting nanoparticles damaging the cells around, or axons, causing tissue loss, encroaching on photoreceptors or on other receptors, or causing maculopathies,

retinopathies, cataracts, poor visual acuity or strabismus. These results are as well consistent with the pattern with alpha emitters and their diffuse scattering in schizophrenia.

### Treatments

The eye-brain axis is shown to be affected in many ways by alpha emitters and their Bose-Einstein condensation. The proof is done that many eye diseases are related to internal contamination with alpha emitters of that axis, usually as a comorbidity of a brain syndrome such as autism, TBI or schizophrenia, in relation to the diffuse scattering of the alpha emitters, kept at a distance from each other by their positive push [32] in a "grid" pattern. It nevertheless appears that each disease seems to be linked, overall, to a particular "grid" pattern, with precise comorbidity patterns tendentially emerging for each disease, because each disease is associated to initial disturbance on specific brain areas, and hence from that departure point the scattering of other alpha emitters fills specific "slots" and leaves open others, although some overlap between autism and schizophrenia explains certainly the finding of strabismus as common comorbidity. The diseases may be avoided by stringent self-decontamination from alpha emitters. Coffee and green tea were shown to be significant in this regard. Excretion is key and no excretory channel should be disregarded. But air pollution remains a dire issue, in particular in East Asia, and measures tackling the issue at the root should be taken. The development of the treatment of coal with a laser source for neutron spallation and subcritical neutron capture & fission (thanks to the fast neutrons from laser spallation, and their slow-down by coal) is required. Crematory activities in China seem to explain heavily the levels of air pollution there. It is reminded that crematory activities cannot achieve a good fission yield, except when the target is extremely fat, because biological matter remains an obstacle to the efficient capture and fission by neutrons (see [33] and [34]). This is why these fumes convey a lot of alpha emitters, and the human ash co-contamination makes them particularly sticky, a pattern identical to what was described in [35] arising henceforth. There are also similar issues in India from traditional crematory activities, which explains clearly why out of three blind persons in the world, one is in India according to a source [36] although Indian governmental data does not give such a gloomy perspective on blindness in the country (see in [37]). The progressive entry of crematory ashes into the eye creates the blur and explains the "black eye" phenomenon in blind people. A procedure such as LASIK to then remove the ashes that are creating the black dam in front of the eye should be perhaps envisioned to treat the problem at its root. Some data in [38] suggested already that there is room for tackling cecity by simply decreasing the contamination with alpha emitters that is the second essential piece together with the reduction of the crematory ash contamination within the eye.

### Conclusion

There is a consistent effect of the grid pattern systematical with a diffuse contamination by alpha emitters in the brain, affecting vision and the thyroid among other bodily functions

and organs, causing many eye diseases with a large degree of variability depending on the initial pattern of the TBI that this review attempted to circle. Experience shows that treatment is possible. Raising awareness on TBI, including in very young children, and on the shaken baby syndrome is certainly also imperative to reduce the long-term incidence of these diseases. Healing is costly and prevention allows saving a lot of efforts later.

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### Institutional Review Board Approval

Not applicable for this article.

### Ethical Compliance with Human / Animal Study

Not applicable.

### Data Availability

Any inquiries regarding supporting data availability of this study should be directed to the corresponding author.

### References

1. Pirot F. (2020). Traumatic Brain Injury: a Case Report and Its Contribution to Understanding the Underlying Mechanisms - Alpha-Emitting Nanoparticulates Proven as Key. *American Journal of Medical Case Reports*. Vol. 8, No. 4, pp 100-102. <http://pubs.sciepub.com/ajmcr/8/4/2>
2. Pirot F. (2021). The shuriken effect of fertile alpha emitters: a physical process behind findings of chemical toxicity of depleted uranium. *International Journal of Nanoparticle Research*, 4:15. DOI: 10.28933/ijonr-2021-03-1303
3. Chang HK, Hsu JW, Wu JC, Huang KL, Chang HC, Bai YM, Chen TJ, Chen MH. (2018). Traumatic Brain Injury in Early Childhood and Risk of Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorder: A Nationwide Longitudinal Study. *J Clin Psychiatry*, 16;79(6):17m11857. DOI:10.4088/JCP.17m11857. PMID: 30403445.
4. Ma J, Wang B, Gao X, Wu H, Wang D, Li N, Tan J, Wang J, Yan L. (2018). A comparative study of the typical toxic metals in serum by patients of schizophrenia and healthy controls in China. *Psychiatry Res*, 269:558-564. doi: 10.1016/j.psychres.2018.08.114. Epub 2018 Aug 30. PMID: 30199697.
5. Pirot F. ((2020). Schizophrenia: An Observational Study and Demonstration that Alpha-emitting Nanoparticulates Effect Is not Hereditary but Direct in the Brain (Explaining Core Relation with TBI). *American Journal of Medical Case Reports*, vol. 8, no. 12: 453-455. DOI: 10.12691/ajmcr-8-12-5.
6. Fido A, Al-Saad S. (2005). Toxic trace elements in the hair of children with autism. *Autism*, 9(3):290-8. doi: 10.1177/1362361305053255. PMID: 15937043.
7. Pirot F. Autism, Primitive Rebellion Against Authoritarian Theocratism – Family Education, Alpha Emitting Nanoparticulates and Bigotries. *British Journal of Healthcare and Medical Research*, 9(6), 130–133. DOI: 10.14738/jbemi.96.13568
8. Pirot F. (2019). Contamination with Natural Radioactivity and Other Sources of Energy – the Explanation for Bose-Einstein Condensates, for the Creeping Behaviour of Helium and for the “Casimir Effect”, *International Journal of Physics*, 7(3), 95-96. DOI: 10.12691/ijp-7-3-5
9. Pirot F. (2021). “Spitting as traditional medicine” – why alpha-emitting nanoparticulates make spitting an unfortunate but significant contribution to health. *International Journal of Traditional and Complementary Medicine*, 6:33. DOI: 10.28933/ijtcm-2021-01-2306
10. Foster PJ, Jiang Y. (2014). Epidemiology of myopia. *Eye (Lond)*. 2014 Feb;28(2):202-8. DOI:10.1038/eye.2013.280. Epub, PMID: 24406412; PMCID: PMC3930282.
11. Saw SM, Zhang MZ, Hong RZ, Fu ZF, Pang MH, Tan DT. (2002). Near-work activity, night-lights, and myopia in the Singapore-China study. *Arch Ophthalmol*, 120 (5:620–627)
12. Morgan A, Young R, Narankhand B, Chen S, Cottrill C, Hosking S. (2006). Prevalence rate of myopia in schoolchildren in rural Mongolia. *Optom Vis Sci*, 83 (1:53–56).
13. Pokharel GP, Negrel AD, Munoz SR, Ellwein LB. (2000). Refractive Error Study in Children: results from Mechi Zone, Nepal. *Am J Ophthalmol*, 129 (4:436–444).
14. Parssinen O. (2012). The increased prevalence of myopia in Finland. *Acta Ophthalmol.*;90 (6:497–502).
15. Hashemi H, Fotouhi A, Yekta A, Pakzad R, Ostadimoghaddam H, Khabazkhoob M. (2017). Global and regional estimates of prevalence of refractive errors: Systematic review and meta-analysis. *J Curr Ophthalmol*, 30(1):3-22. DOI:10.1016/j.joco.2017.08.009. PMID: 29564404; PMCID: PMC5859285.
16. Gupta R, Sharma B, Jawla S, Zhang J, Wu Y, Bullimore M. (202). Global epidemiology, humanistic, and economic burden of astigmatism: a systematic literature review, Poster presented at ISPOR Europe, Vienna, Austria, 6-9 November 2022
17. Fang, R., Yu, YF., Li, EJ. et al. ((2022). Global, regional, national burden and gender disparity of cataract: findings from the global burden of disease study 2019. *BMC Public Health* 22, 2068. <https://doi.org/10.1186/s12889-022-14491-0>
18. Hashemi, H., Pakzad, R., Yekta, A. et al. (2020). Global and regional prevalence of age-related cataract: a comprehensive systematic review and meta-analysis.

- Eye* 34, 1357–1370. <https://doi.org/10.1038/s41433-020-0806-3>
19. Singman EL, Daphalapurkar N, White H, Nguyen TD, Panghat L, Chang J, McCulley T. (2016). Indirect traumatic optic neuropathy. *Mil Med Res*, 3:2. DOI: 10.1186/s40779-016-0069-2. PMID: 26759722; PMCID: PMC4709956.
  20. Howell GR, Soto I, Libby RT, John SW. (2013). Intrinsic axonal degeneration pathways are critical for glaucomatous damage. *Exp Neurol*, 246:54-61. DOI: 10.1016/j.expneurol.2012.01.014. Epub 2012 Jan 18. PMID: 22285251; PMCID: PMC3831512.
  21. Dias MS, Luo X, Ribas VT, Petrs-Silva H, Koch JC. (2022). The Role of Axonal Transport in Glaucoma. *International Journal of Molecular Sciences*, 23(7):3935. <https://doi.org/10.3390/ijms23073935>
  22. Loganovsky KN, Marazziti D, Fedirko PA, Kuts KV, Antypchuk KY, Perchuk IV, Babenko TF, Loganovska TK, Kolosynska OO, Kreinis GY, Gresko MV, Masiuk SV, Mucci F, Zdorenko LL, Della Vecchia A, Zdanevich NA, Garkava NA, Dorichevska RY, Vasilenko ZL, Kravchenko VI, Drosdova NV. (2020). Radiation-Induced Cerebro-Ophthalmic Effects in Humans. *Life (Basel)*, 10(4):41. DOI: 10.3390/life10040041. PMID: 32316206; PMCID: PMC7235763.
  23. Mining boss's shock glaucoma diagnosis prompts warning for others to get eye tests, May 8th 2023, ABC News, <https://www.abc.net.au/news/2023-05-08/glaucoma-diagnosis-sparks-eye-test-warning/102311122>
  24. Hari Kumar KV, Swamy MN, Khan MA. (2016). Prevalence of hypothalamo pituitary dysfunction in patients of traumatic brain injury. *Indian J Endocrinol Metab*, 20(6):772-778. DOI: 10.4103/2230-8210.192917. PMID: 27867878; PMCID: PMC5105559
  25. Howland RH. (1993). Thyroid dysfunction in refractory depression: implications for pathophysiology and treatment. *J Clin Psychiatry*, 54(2):47-54. PMID: 8444820.
  26. Miller AC, Rivas R, Tesoro L, Kovalenko G, Kovacic N, Pavlovic P, Brenner D. (2017). Radiation exposure from depleted uranium: The radiation bystander effect. *Toxicol Appl Pharmacol*, 331:135-141. DOI: 10.1016/j.taap.2017.06.004. Epub 2017 Jun 9. PMID: 28602947.
  27. Black K, McCarus C, Collins ML, Jensen A. (2013). *Ocular manifestations of autism in ophthalmology. Strabismus*, 21(2):98-102. DOI:10.3109/09273972.2013.786733. PMID: 23713930.
  28. Ikeda J, Davitt BV, Ulmann M, Maxim R, Cruz OA. (2013). Brief report: incidence of ophthalmologic disorders in children with autism. *J Autism Dev Disord*, 43(6):1447-51. DOI: 10.1007/s10803-012-1475-2. PMID: 22350452.
  29. Jure R, Pogonza R, Rapin I. (2016). Autism Spectrum Disorders (ASD) in Blind Children: Very High Prevalence, Potentially Better Outlook. *J Autism Dev Disord*, 46(3):749-59. DOI: 10.1007/s10803-015-2612-5. PMID: 26408327.
  30. Dahl S, Wickström R, Ek U, Teär Fahnehjelm K. (2018). Children with optic nerve hypoplasia face a high risk of neurodevelopmental disorders. *Acta Paediatr*; 107(3):484-489. DOI: 10.1111/apa.14163. Epub 2017 Dec 19. PMID: 29172231.
  31. Silverstein SM, Rosen R. (2015). Schizophrenia and the eye. *Schizophr Res Cogn*, 2(2):46-55. DOI: 10.1016/j.scog.2015.03.004. PMID: 26345525; PMCID: PMC4559409.
  32. Pirot F. (2022). The “Reverse Magnet Effect” of Alpha Emitters and the Health Costs of Depleted Uranium in the Balkans: The Root of the Debt Crisis in Greece, Italy, Portugal, Spain and Ireland. *Medical Research Archives*, [S.l.], v. 6, n. 9, sept., DOI: 10.18103/mra.v10i9.3118
  33. Pirot F. (2022). A Pandora Box of Case Studies for The Pandoravirus and Other Megaviruses – Long-Term Disease Risk Related to Crematory Ovens / Mash (from e.g., Uranium Retchlags). *Trends in Internal Medicine*, 2(2): 1-4
  34. Pirot F. (2023). The Crematory Key to the Greenhouse Effect with Volcanic Ashes: The Key of the Anthropocene Resides in Human Cremation. The Dangerous Loop that Remains to be Smashed to End Global Warming Definitively. *London Journal of Research in Science, Natural and Formal*, Vol 23 issue 3, March 2023.
  35. Pirot F. (2023). The Crematory Oven and Mash & Homosexuality Loop Demonstrated : the Origins of the Gay Nazi Trope, Homosexuality In The Soviet Union and Lessons For Modern Times, *J. Endocrinology and Disorders*, 7(3): DOI:10.31579/2640-1045/135
  36. Centre for Sight, Blindness in India, <https://www.centreforsight.net/blog/blindness-in-india/>
  37. Mannava S; Borah, RR ; Shamanna, BR. (2022). Current estimates of the economic burden of blindness and visual impairment in India: A cost of illness study. *Indian Journal of Ophthalmology*, 70(6):p 2141-2145, DOI: 10.4103/ijo.IJO\_2804\_21
  38. Pirot, F. (2023). The Value of Plutonium - Cement Fallout for Health Protection in A Dense Oncological Landscape - Elements for Systematization. *European Journal of Applied Sciences*, , 11(2), 208–211. <https://doi.org/10.14738/aivp.112.14239>.

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