Studies Taylor claims “support vaccine/autism causation”

1. Hepatitis B Vaccination of Male Neonates and Autism (original Taylor number = 42)


Very weak study with numerous flaws. Debunked at:

http://leftbrainrightbrain.co.uk/2010/09/16/autism-causation-and-the-hepatitis-b-vaccine-no-link/

http://www.harpocratesspeaks.com/2013/05/mind-institute-no-difference-in.html


2. Do aluminum vaccine adjuvants contribute to the rising prevalence of autism? (Original Taylor number = 53)


Fatally flawed “study” – junk science. Debunked at:

http://leftbrainrightbrain.co.uk/2013/07/10/comment-on-do-aluminum-vaccine-adjuvants-contribute-to-the-rising-prevalence-of-autism/

3. **Infection, vaccines and other environmental triggers of autoimmunity** (Not in original Taylor list)


Nothing to do with autism; also seems to be a discursive paper rather than a “research study”.

4. **A Positive Association found between Autism Prevalence and Childhood Vaccination uptake across the U.S. Population (Original Taylor number = 51)**


Junk “science” debunked here, for starters


http://leftbrainrightbrain.co.uk/2012/03/07/conflicts-of-interest-in-vaccine-safety-research/


5. **B-Lymphocytes from a Population of Children with Autism Spectrum Disorder and Their Unaffected Siblings Exhibit Hypersensitivity to Thimerosal** (Not in Taylor’s original list.)

In vitro study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines. Only 11 families studied.

6. Abnormal measles-mumps-rubella antibodies and CNS autoimmunity in children with autism. (Not in Taylor’s original list.)


Singh’s work has not been replicated. Multiple studies in multiple countries with tens of thousands of subjects have repeatedly failed to find an association between measles vaccine and autism.

http://www.immunizationinfo.org/issues/iom-reports/measles-mumps-rubella-vaccine-and-autism

http://www.immunizationinfo.org/science/no-evidence-mmr-vaccine-causes-autism

7. Serological association of measles virus and human herpesvirus-6 with brain autoantibodies in autism. (Not in Taylor’s original list.)


Note that this paper is from 1998. Singh’s work has not been replicated. Multiple studies in multiple countries with tens of thousands of subjects have repeatedly failed to find an association between measles vaccine and autism.

http://www.immunizationinfo.org/issues/iom-reports/measles-mumps-rubella-vaccine-and-autism

http://www.immunizationinfo.org/science/no-evidence-mmr-vaccine-causes-autism
8. **Metabolic biomarkers of increased oxidative stress and impaired methylation capacity in children with autism (Original Taylor number = 1)**


Nothing to do with vaccines.

9. **Porphyrinuria in childhood autistic disorder: Implications for environmental toxicity (original Taylor number = 2)**


“Extremely haphazard science”

Discussion

Also has nothing to do with vaccines.

10. **Uncoupling of ATP-mediated Calcium Signaling and Dysregulated IL-6 Secretion in Dendritic Cells by Nanomolar Thimerosal (Original Taylor number = 4)**


In-vitro study of mouse cells exposed to trace (nano) amounts of thimerosal.
Discussion


Never-replicated

11. Comparison of Blood and Brain Mercury Levels in Infant Monkeys Exposed to Methylmercury or Vaccines Containing Thimerosal (Original Taylor number = 6)


Discusses methylmercury, not ethylmercury, the latter of which is thimerosal (which is no longer used in childhood vaccines in the U.S. other than the flu vaccine). Widely debunked.


12. Increases in the number of reactive glia in the visual cortex of Macaca fascicularis following subclinical long-term methyl mercury exposure. (Original Taylor number = 7)


Discusses a form of mercury, methyl mercury, NEVER used in vaccines.

The monkeys were exposed to very high doses (50 micrograms Hg/kg body wt/day) every day for months.

There is no research linking increased reactive glia in the visual cortex to autism.

13. Neuroglial Activation and Neuroinflammation in the Brain of Patients with Autism (Original Taylor number = 8)


The lead author wrote,

We were concerned that the study would raise a lot of controversy and be misused,” Pardo said. “We were right.”


More analysis


Also, nothing to do with vaccines.

14. Autism: A Brain Disorder, or A Disorder That Affects the Brain? (Original Taylor number = 9)

Correct citation: Herbert MR, Autism: A Brain Disorder, or A Disorder That Affects the Brain? Clinical Neuropsychiatry 2005 2:(6) 354-379

This is a long opinion piece, draped in sciencey-sounding language. Does this paper "demonstrate that vaccines can cause autism"? No. This paper is merely Herbert's notions about causation.

15. Activation of Methionine Synthase by Insulin-like Growth Factor-1 and Dopamine: a Target for Neurodevelopmental Toxins and Thimerosal (Original
**Taylor number = 10**


The 2010 Dwyer decision:

[Deth's] own research, most of which was unpublished, unduplicated, or mentioned for the first time during the Theory 2 general causation hearing, was poorly performed and scientifically implausible. Based on in vitro effects of mercury on “neuronal cells,” he claimed that mercury had the same effects on human brain cells.

Discussion in depth:


16. **Validation of the Phenomenon of Autistic Regression Using Home Videotapes (original Taylor number = 11)**


The phenomenon of regression in autism is well-known, and in no way validates the idea that vaccines are causal in autism.

Discussion:


A later Bearman paper characterizes six developmental trajectories in autism

17. Blood Levels of Mercury Are Related to Diagnosis of Autism: A Reanalysis of an Important Data Set (original Taylor number = 12)


The infamous Desoto & Hitlan paper. This was subject to a great deal of critical commentary among scientifically and statistically expert autism parents and other interested observers, for example:

http://scienceblogs.com/insolence/2008/07/16/epiwonk-reanalyzes-the-dataset-desoto-an/
http://epiwonk.com/?p=112

Summary of the demolition:


More later at

http://leftbrainrightbrain.co.uk/2010/08/03/prof-desoto-discusses-mercury-and-autism/

18. Empirical Data Confirm Autism Symptoms Related to Aluminum and Acetaminophen Exposure (Not in Taylor’s original list.)


This shoddy and incompetent paper was discussed at length at:


19. Developmental Regression and Mitochondrial Dysfunction in a Child With Autism (Original Taylor number = 13)

The scandalous Poling paper:

With "Developmental Regression and Mitochondrial Dysfunction in a Child with Autism", Dr. Jon Poling takes his place with Dr. Andrew Wakefield, Dr. Mark Geier and Laura Hewitson, Ph.D. in the ranks of researchers who have concealed relevant legal and financial interests in studies purporting to confirm a causal relationship between vaccines and autism.

In short: Dr. Poling behaved in an appalling manner. There is no question that Hannah Poling has a mitochondrial disorder; in such cases neurological symptoms often develop after 12 months and before 24 months. The "autistic like" symptoms demonstrated by Hannah Poling were part of a global encephalopathy caused by a mitochondrial enzyme deficit.

Does this case or this paper "demonstrate that vaccines can cause autism"? No.

20. Oxidative Stress in Autism: Elevated Cerebellar 3-nitrotyrosine Levels (original Taylor Number = 14)


This study has nothing to do with vaccines.

21. Large Brains in Autism: The Challenge of Pervasive Abnormality (original Taylor number = 15)


“Clearly, Dr. Herbert’s method is not generally accepted in the scientific community. Dr. Herbert’s theory of environmental triggers of autism may some day prove true. It has not yet.”

This paper has nothing to do with vaccines.

22. Evidence of Toxicity, Oxidative Stress, and Neuronal Insult in Autism (original Taylor number = 16)


Does this paper "demonstrate that vaccines can cause autism"? No, this is a review paper rather than a randomized, controlled study of vaccines in autism.

Kern is a co-author on 31 papers. It is worrying that of those, two are positive studies on secretin and 14 have one or both Geiers as co-authors, including two from 2012 and one from 2011. In 2012, she was employed by the Geier chemical-castration-for-autism chain.

23. Oxidative Stress in Autism (Original Taylor number = 17)


This is a review article, summarizing the research to date on oxidative stress in autism and some implications for therapies. The conclusion:

Preliminary results of some of clinical trials have suggested improved behavior in individuals with autism who receive antioxidant therapy.

Does this paper "demonstrate that vaccines can cause autism"? No.

24. Thimerosal Neurotoxicity is Associated with Glutathione Depletion: Protection with Glutathione Precursors (original Taylor number = 18)

Another in-vitro study with a concentration of thimerosal (no longer used in childhood vaccines in the U.S., with the exception of some flu vaccines) much higher than in vaccines.

25. Aluminum adjuvant linked to gulf war illness induces motor neuron death in mice (Original Taylor number = 19)


Mouse model, not a human study. Small and weak; never replicated.

26. Enrichment of Elevated Plasma F2t-Isoprostane Levels in Individuals with Autism Who Are Stratified by Presence of Gastrointestinal Dysfunction (Not in Taylor’s original list)


Gorrindo P, Lane CJ, Lee EB, McLaughlin B, Levitt P (July 3, 2013)

This study has nothing to do with vaccines.

27. Environmental mercury release, special education rates, and autism disorder: an ecological study of Texas (Original Taylor number = 20)


“Dr. Palmer’s 2006 study, which was so full of holes that even antivaccinationists had a hard time defending it,”
This study has nothing to do with vaccines.

28. **Reduced levels of mercury in first baby haircuts of autistic children** *(Not in original Taylor list)*


The fatally flawed baby-hair study.

The first flaw in the study is the authors' acceptance of the idea of "excretion into the hair". It doesn't happen. Blood mercury does not equal hair mercury.

The second flaw is the data collection methods (the hair used in the study)

The third flaw is that the study found that the autistic children had lower hair mercury levels than the neurotypical controls. Rather than accepting that data, the authors went on to spin "tooth fairy tales" to explain why that might be so (the idea that autistic children had impaired mercury excretion). The fourth flaw in the study involves the hair analyzed: the samples had been in storage under unknown conditions for a median of five and a half years.

Do I really need to go on why Holmes et al. is a broken reed? I don't think so. It was, when published, a footling study. Anyone citing it, reveals their lack of in serious science writing. Holmes et al. 2003 isn't even a weak reed -- it's an over-cooked noodle.

But wait: One more thing you should know: Holmes et al. 2003 authors' affiliations are given as Safeminds. Safeminds is an acronym for Sensible Action For Ending Mercury Induced Neurological Disorders. Do you think the authors had an ideological point to make?

Discussion


This study has nothing to do with vaccines.
29. **A Case Series of Children with Apparent Mercury Toxic Encephalopathies Manifesting with Clinical Symptoms of Regressive Autistic Disorder (Original Taylor number = 22)**


How anyone could cite the deeply discredited Geier family (father and son) is beyond me.

http://leftbrainrightbrain.co.uk/2006/06/20/mark-geier-and-david-geier-carry-on-misrepresenting/

http://leftbrainrightbrain.co.uk/2006/10/10/mark-geier-david-geier-and-the-vsdl/

That’s just *this* paper. Others from the father-son team garnered even more scathing criticism.


Correct Citation: Blaxill MF, Baskin DS, Spitzer WO Commentary on on Croen et al. (2002), The Changing Prevalence of Autism in California, J Autism Dev Disord. 2003 April;33(2):223-226

This is merely a commentary on a previously published article. Not peer reviewed and expresses the authors’ own rather biased beliefs.

31. **Mitochondrial Energy-Deficient Endophenotype in Autism (Original Taylor number = 46)**


Vaccines not mentioned in the article. Discussion of possible rare subtype(s) of autism with genetic mutations causing mitochondrial deficiencies.
Note: this and other papers in this issue were published in a special issue of the American Journal of Biochemistry and Biotechnology, supported by Autism Speaks.


32. Bridging from Cells to Cognition in Autism Pathophysiology: Biological Pathways to Defective Brain Function and Plasticity (Original Taylor number = 26)


Speculative article on the possible non-genetic causation mechanisms for autism. Vaccines, vaccination, immunization not mentioned in the article.

Note: this and other papers in this issue were published in a special issue of the American Journal of Biochemistry and Biotechnology, supported by Autism Speaks.


33. Heavy-Metal Toxicity—With Emphasis on Mercury (Original Taylor Number = 27)


This is an article from a fringe journal for naturopaths. The article is alarmist about amalgam fillings as a risk of mercury toxicity, but nowhere mentions vaccines.

34. Evidence of Mitochondrial Dysfunction in Autism and Implications for Treatment (Original Taylor Number = 28)

This study has nothing to do with vaccines.

Note: this and other papers in this issue were published in a special issue of the American Journal of Biochemistry and Biotechnology, supported by Autism Speaks.


35. Proximity to point sources of environmental mercury release as a predictor of autism prevalence (Original Taylor number = 29)


A deeply flawed paper.

http://scienceblogs.com/insolence/2008/05/01/wait-its-not-mercury-in-vaccines-its-mer/

“If [Palmer] has an obvious source of bias, it may well explain much; if he does not I’m left with the less satisfying conclusion that he is just not a very good scientist at all. I also have to wonder about the quality of the peer review of this particular journal. After all, if I, who am not an epidemiologist, can spot the glaring flaws in this study, why couldn’t the peer reviewers?”

36. Epidemiology of autism spectrum disorder in Portugal: prevalence, clinical characterization, and medical conditions (Original Taylor number = 30)


I was puzzled as to why this was included, but the survey found "A diversity of associated medical conditions was documented in 20%, with an unexpectedly high rate of mitochondrial respiratory chain disorders." Poling and others have used this finding to
claim that "up to 20% of children with autism have mitochondrial disorders".

37. Thimerosal induces neuronal cell apoptosis by causing cytochrome c and apoptosis-inducing factor release from mitochondria. (Original Taylor number = 31)


Another in-vitro study, possibly with very high thimerosal exposure.

38. Mitochondrial mediated thimerosal-induced apoptosis in a human neuroblastoma cell line (SK-N-SH). (Original Taylor number = 32)


In-vitro study.

39. Possible Immunological Disorders in Autism: Concomitant Autoimmunity and Immune Tolerance (Original Taylor number = 33)


Study does not mention vaccines. Study has not been replicated.

40. Pediatric Vaccines Influence Primate Behavior, and Amygdala Growth and Opioid Ligand Binding Friday, May 16, 2008: IMFAR (Original Taylor number = 32)

This was one of three poster presentations at the 2008 meeting of the International
Meeting for Autism Research (IMFAR) by Hewiston and others (including Wakefield) on a set of primates (macaque monkeys, species unknown). The “monkey mess” is summarized here

http://lizdit.typepad.com/i_speak_of_dreams/2012/05/this-is-going-around-new-study-baby-monkeys-develop-autism-after-routine-cdc-vaccinations.html

Others write about Hewitson’s research peccadillos here (a non-exhaustive list):


http://www.sciencebasedmedicine.org/monkey-business-in-autism-research/

41. Thimerosal exposure in infants and neurodevelopmental disorders: An assessment of computerized medical records in the Vaccine Safety Datalink. (Original Taylor number =35)


This paper has to be one of the most thoroughly scrutinized (and debunked) of all the papers that claim a connection between vaccines and autism.

http://epiwonk.com/?p=55

http://epiwonk.com/?p=57

http://epiwonk.com/?p=59

http://bmartinmd.com/2008/05/irb-approval-of-geier-autism-s.html

http://bmartinmd.com/2008/05/ive-been-sucked-into-the-thime.html
42. Glutathione, oxidative stress and neurodegeneration (Original Taylor number = 32)


This study does not discuss vaccination or autism.

43. Hepatitis B triple series vaccine and developmental disability in US children aged 1-9 years (Original Taylor number = 37)


A later study found that children with ASD had a lower uptake of HepB.

https://imfar.confex.com/imfar/2013/webprogram/Paper12796.html

http://www.harpocratesspeaks.com/2013/05/mind-institute-no-difference-in.html

44. Induction of metallothionein in mouse cerebellum and cerebrum with low-dose thimerosal injection. (Original Taylor number = 38)

Correct citation: Minami T, Miyata E, Sakamoto Y, Yamazaki H, Ichida S. Induction of

Studies in mice using a carrier medium. Does not prove that autism is caused by vaccination, with or without thimerosal.

45. Mercury induces inflammatory mediator release from human mast cells (Original Taylor number = 39)


In-vitro study of mercuric chloride (HgCl2), not ethyl mercury or thimerosal. Does not “show vaccines cause autism”.

46. Influence of pediatric vaccines on amygdala growth and opioid ligand binding in rhesus macaque infants: A pilot study (Original Taylor)


Another of the infamous, ever evolving Hewitson macaque papers.

Debunked at


http://leftbrainrightbrain.co.uk/2010/07/16/the-genie-is-out-of-the-bottle-vaccines-cause-autism/

“This paper is generating quite a bit of interest in places like the Age of Autism blog. Unfortunately for them, this paper is not the genie getting out of the bottle. Just another low quality paper. Just another 16 monkeys giving their lives for nothing.”
For a complete history of the Hewitson macaque study and its various papers and authors, see:
http://lizditz.typepad.com/i_speak_of_dreams/2012/05/this-is-going-around-new-study-baby-monkeys-develop-autism-after-routine-cdc-vaccinations.html

Note: This issue of Acta Neurobiologiae Experimentalis (ANE) focused upon autism. Not just autism, but autism causation with papers on vaccines, acetaminophen and, of course, mercury. The idea for this focus edition came from Professor Dorota Majewska who holds the EU Marie Curie Chair at the Institute of Psychiatry and Neurology in Warsaw, Poland. The authors for this focus issue are largely the same as those from a conference Prof. Majewska organized in 2008, Autism and Vaccinations.

47. Cultured lymphocytes from autistic children and non-autistic siblings up-regulate heat shock protein RNA in response to thimerosal challenge. (Original Taylor number = 41)


An in-vitro cell study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), using concentrations higher than formerly found in vaccines.

48. Neonatal administration of a vaccine preservative, thimerosal, produces lasting impairment of nociception and apparent activation of opioid system in rats. (Original Taylor number = 59)


Rat study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines.

Note: lead researcher M Dorota Majewska seems to have specialized in rat studies that show thimerosal damage.

49. Sorting out the spinning of autism: heavy metals and the question of incidence
(Original Taylor number = 44)


Debunked at

http://leftbrainrightbrain.co.uk/2010/08/03/prof-desoto-discusses-mercury-and-autism/

Note: This issue of Acta Neurobiologiae Experimentalis (ANE) focused upon autism. Not just autism, but autism causation with papers on vaccines, acetaminophen and, of course, mercury. The idea for this focus edition came from Professor Dorota Majewska who holds the EU Marie Curie Chair at the Institute of Psychiatry and Neurology in Warsaw, Poland. The authors for this focus issue are largely the same as those from a conference Prof. Majewska organized in 2008, Autism and Vaccinations.

50. Urinary Porphyrin Excretion in Neurotypical and Autistic Children (Original Taylor number = 45)


It is an article of belief in some circles that urinary porphyrin excretion abnormalities is a biomarker for autism. However, the foundations of that belief rest upon studies performed by the disgraced and discredited Geier family (father and son).

The above article does not mention vaccines.

51. Mitochondrial dysfunction in autism spectrum disorders: a systematic review and meta-analysis (Original Taylor number = 46)


Review article, not study. This paper has nothing to do with vaccines
52. Sensitization effect of thimerosal is mediated in vitro via reactive oxygen species and calcium signaling. (Original Taylor number = 47)


In vitro study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines.

53. What's going on? The question of time trends in autism. (Not in Taylor’s original list.)

Review of survey literature available in years prior to 2004. Outdated and superceded by many more reliable publications.

54. Vaccines and Autism. (Not in Taylor’s original list.)
Correct citation, Rimland B, McGinnis W, Vaccines and Autism, Laboratory medicine, september 2002 9: 33 708-717

Downloaded from http://labmed.ascpjournals.org/content/33/9/708.full.pdfAutism Research Institute, San Diego, CA 7/27/2013

Laboratory Medicine, the journal for laboratory professionals. 11-year-old discursive article discussing the authors’ belief that something about the MMR vaccine and thimerosal is causal in autism. Later studies found no autism connection with either factor.

55. Theoretical aspects of autism: Causes—A review (Original Taylor number = 50)

This is one of the more risible papers in the list.
http://leftbrainrightbrain.co.uk/2011/02/11/sloppy-science-a-perfect-example-of-how-the-anti-vaccine-crowd-will-listen-to-anything/

“The rest of the paper is a rogues gallery of debunked and fringe science. Helen Ratajczak cites the Geier’s numerous times, DeSoto and Hitlan, Nataf and Rossignol to name but a few. This isn’t a paper so much as an advert for the sort of poor science that was examined in the Autism Omnibus proceedings and roundly rejected by the Special Masters. For goodness sake, she even cites David Ayoub of the Black Helicopter infamy.”


"How on earth did this get through peer review? Obviously, the peer reviewers of Dr. Ratajczak’s article were either completely ignorant of the background science (and therefore unqualified) or asleep at the switch."


56. Ancestry of pink disease (infantile acrodynia) identified as a risk factor for autism spectrum disorders. (Not in Taylor’s original list.)


Debunked at


This is, at best, a very strange paper. Consider these questions:

1) Why aren’t they reporting a high autism prevalence in the people who had very high mercury exposures and who showed signs of pink disease? If there is a genetic susceptibility, why isn’t it seen in those with the greatest exposures?
2) Why isn’t there a report of high autism prevalence in the children, just the grandchildren? My guess is that the response from some will be that the grandchildren received higher doses of mercury in vaccines than did their parents. Which again would beg the question of where is the high rate of autism in those exposed to the teething powders, especially those who developed pink disease.

The conclusions of this paper have some major logical hurdles to overcome, to say the least. And this is even before the methods are addressed. For example, this all hinges on reports by the grandparents. Not on an actual prevalence measure of the descendants.

57. Lasting neuropathological changes in rat brain after intermittent neonatal administration of thimerosal. (Original Taylor number = 54)


Rat study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines.

*Note: lead researcher M Dorota Majewska seems to have specialized in rat studies that show thimerosal damage.*

58. Persistent behavioral impairments and alterations of brain dopamine system after early postnatal administration of thimerosal in rats. (Not in Taylor’s original list.)


*Note: lead researcher M Dorota Majewska seems to have specialized in rat studies that show thimerosal damage.*

59. Risk Factors for Autistic Regression: Results of an Ambispective Cohort Study. (Original Taylor number = 56)

Cohort study on 170 Chinese children. Study does not mention vaccines.

60. **Adverse events following 12 and 18 month vaccinations: a population-based, self-controlled case series analysis.** (Original Taylor number = 57)


Study of adverse events after vaccines, but nothing to do with autism. “...one excess event for every 730 children vaccinated. The primary reason for increased events was statistically significant elevations in emergency room visits following all vaccinations. There were non-significant increases in hospital admissions. There were an additional 20 febrile seizures for every 100,000 vaccinated at 12 months.”

61. **Administration of thimerosal to infant rats increases overflow of glutamate and aspartate in the prefrontal cortex: protective role of dehydroepiandrosterone sulfate.** (Original Taylor number = 58)


Rat study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines.

*Note: lead researcher M Dorota Majewska seems to have specialized in rat studies that show thimerosal damage.*

62. **Neonatal Administration of Thimerosal Causes Persistent Changes in Mu Opioid Receptors in the Rat Brain**

Rat study, thimerosal (no longer used in U.S. childhood vaccines except for some influenza vaccines), concentrations higher than formerly found in vaccines.

Note: lead researcher M Dorota Majewska seems to have specialized in rat studies that show thimerosal damage.

63. Unanswered Questions: A Review of Compensated Cases of Vaccine-Induced Brain Injury (Not on Taylor’s original list)


This was a very poor-quality review in a student-run law journal, with substantial ethical and methodological flaws.

Debunked here:

http://www.wired.com/geekmom/2011/05/is-the-vaccine-injury-compensation-program-covering-up-an-autism-vaccine-link/


http://leftbrainrightbrain.co.uk/2011/05/11/pace-study-confirms-autism-prevalence/

http://leftbrainrightbrain.co.uk/2011/05/20/study-by-nyu-and-pace-another-failure-in-obtaining-ethical-approval/


http://scienceblogs.com/insolence/2011/05/24/anti-vaccine-warriors-vs-research-ethics/
64. **Integrating experimental (in vitro and in vivo) neurotoxicity studies of low-dose thimerosal relevant to vaccines.**


In vitro study, with a small inclusion of a rat study.

65. **Hepatitis B vaccine induces apoptotic death in Hepa1-6 cells (Original Taylor number = 55)**


An in-vitro study of how mouse (murine) cells derived from a cancerous tumor react to being bathed in Hepatitis B vaccine. No mention of autism. No relevance to autism.

66. **Maternal thimerosal exposure results in aberrant cerebellar oxidative stress, thyroid hormone metabolism, and motor behavior in rat pups; sex- and strain-dependent effects. (Not in Taylor’s original list)**


Rat study looking at thimerosal, which is no longer used in childhood vaccines in the U.S. (with the exception of some influenza vaccines).
67. **The rise in autism and the role of age at diagnosis.**


“Autism incidence in California shows no sign yet of plateauing. Younger ages at diagnosis, differential migration, changes in diagnostic criteria, and inclusion of milder cases do not fully explain the observed increases.”

Evidently, according to Taylor, that means that vaccine must account for the observed increases, while disregarding significant changes in demographic data, such as maternal and paternal age at first childbirth.

It is curious that Taylor does not include the other 18 papers on autism in which Hertz-Picciotto has been a contributing author.

http://www.ncbi.nlm.nih.gov/pubmed?term=((Hertz-Picciotto%20I%5BAuthor%5D)%20AND%20(%222009%2F1%2F1%22%5BDate%20%20Publication%5D)%20AND%20%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publication%5D)%20AND%20%22%5BDate%20%20Publicat

68. **Slow CCL2-dependent translocation of biopersistent particles from muscle to brain** (Not in Taylor’s previous list)


This paper assumes that ‘Shoenfeld syndrome” or "Autoimmune (Auto-inflammatory) Syndrome Induced by Adjuvants” (ASIA) is a real condition, not an artifact found by one group of researchers. It has not yet been verified.

69. **Thimerosal and autism? A plausible hypothesis that should not be dismissed.** (Not in Taylor’s previous list)

The concerns about thimerosal have been addressed with epidemiological studies, and dismissed. The concerns about thimerosal have been given a thorough airing in the Vaccine Injury Compensation Program legal hearings (Autism Omnibus) and have been found to be baseless.

70. **Autism Spectrum Disorders in Relation to Distribution of Hazardous Air Pollutants in the SF Bay Area (Not in Taylor’s previous list)**


This study does not address vaccines.

71. **Inflammatory Responses to Trivalent Influenza Virus Vaccine Among Pregnant Women** (Not in Taylor’s previous list.)


Two subsequent studies, listed below, have confirmed the safety of trivalent influenza virus vaccines for pregnant women and the children whose mothers were vaccinated during pregnancy.


72. **Elevated maternal C-reactive protein and autism in a national birth cohort.** (Not in Taylor’s previous list.)

This study does not address vaccines.