

Supplementary Material

Hviid *et al.* 2019 Vaccine-Autism Study: Much Ado About Nothing?

Jeremy R. Hammond, Jeet Varia PhD, Brian Hooker PhD

Appendix 1

From: Christine Stabell Benn <cbenn@health.sdu.dk>

Posted: Monday, August 19, 2024 6:24 AM

To: jeremy@jeremyrhammond.com

Subject: FW: Question re: MMR in Denmark

Dear Jeremy

Response from the corresponding author – I hope you can Google translate. Bottom line: Our description should be correct.

Best wishes,

Christine

Christine Stabell Benn

Professor and Chair

Bandim Health Project and Danish Institute for Advanced Study

University of Southern Denmark

Studiestræde 6, 1455 Copenhagen K

M: +4525883964

Email: cbenn@health.sdu.dk

From: Signe Sørup <signesorup@clin.au.dk>

Date: August 19, 2024 12:21 PM

To: Christine Stabell Benn <cbenn@health.sdu.dk>

Subject: Re: Question re: MMR in Denmark

Hi Christine

Many of the references we have in the article no longer work. But from my other documents I can dig up this:
The 2003 Drug Catalog (attached), it appears that Enders Edmonston is used:

Præparater

ACT-HIB® AVENTIS PASTEUR MSD, Haemophilus influenzae
type b vaccine

inj.subs. (vaccine)

DITeBooster STATENS SERUM INSTITUT, Difteri-
tetanusvaccine

inj.væske, susp.

DITeKiPol STATENS SERUM INSTITUT, Difteri-tetanus-
kighoste-poliovaccine

inj.væ.susp., sprøjte

DITeKiPol/Act-Hib STATENS SERUM INSTITUT, Difteri-
tetanus-kighoste-poliovaccine og Haemophilus
influenzae type b vaccine

pulver og solv.t.inj.susp

HibTITER® WYETH LEDERLE, Haemophilus influenzae type b
vaccine

inj.væ., opl.

Meruvax AVENTIS PASTEUR MSD, Vaccine mod rubella
inj.subs.

MMR® AVENTIS PASTEUR MSD, MFR-vaccine
inj.subs.

Poliovaccine oral (Sabin) trivalent "Aventis Pasteur
MSD" AVENTIS PASTEUR MSD
vaccine

MMR®

MFR-vaccine

J07BD52

AVENTIS PASTEUR MSD

MFR-vaccinen er en frysetørret blandingsvaccine. Den består af levende, svækket mæslingevirus (Enders Edmonston), levende, svækket fåresygevirus (Jeryl Lynn) dyrket i hønsefostercellekulturer og af levende, svækket røde hunde-virus (Wistar RA 27/3) dyrket i humane diploide cellekulturer (WI 38).

Omtalt i afsnittet side 355.

Priorix replaces previous vaccine from approximately week 42 2008: [Microsoft Word - web_38forbag.doc \(ssi.dk\)](#)

NEW MMR VACCINE IN THE CHILDREN'S VACCINATION PROGRAM From approximately week 42, the MMR vaccine is available under the name Priorix®. Unlike the previously used MMR vaccine, Priorix® does not contain human albumin. The vaccines are considered equivalent and have the same side effect profile. Priorix® can be given as a booster dose for persons who have previously been vaccinated with another MMR vaccine. Priorix® is available in 10-dose packages. (TR Nielsen, Drug registration and medical info)

VAXpro replaces Priorix from week 25 2013: [Week 24 - 2013 \(ssi.dk\)](#)

New MMR vaccine in the childhood vaccination program

As a result of the statutory public tender, SSI is changing MMR vaccine. The new MMR vaccine is called MMR VaxPro® and is produced by Sanofi Pasteur. It replaces the MMR vaccine Priorix®, which has been used in the Danish childhood vaccination program since 2008. [EPI-NYT 38/08](#). The two vaccines are considered equivalent and have the same side effect profile. Children who have been vaccinated once with Priorix® can be vaccinated a second time with MMR VaxPro®. The new vaccine is also only available in 10-dose packs and is dispensed from week 25.(B. Neale, Business Development, PH Andersen, Department of Infection Epidemiology)

I think we are right.

Thank you

Signe

From: Christine Stabell Benn <cbenn@health.sdu.dk>

Sent: Friday, August 16, 2024 11:05 p.m

To: Signe Sørup <signesorup@clin.au.dk>

Subject: FW: Question re: MMR in Denmark

Dear Signe

Hope everything is okay.

Have received questions about revac paper - do you remember where we got the information from?

Christine

Christine Stabell Benn

Professor and Chair

Bandim Health Project and Danish Institute for Advanced Study

University of Southern Denmark

Studiestræde 6, 1455 Copenhagen K

M: +4525883964

Email: cbenn@health.sdu.dk

From: jeremy@jeremyhammond.com <jeremy@jeremyhammond.com>

Late: August 16, 2024 10:33 PM

Two: Christine Stabell Benn <cbenn@health.sdu.dk>

Subject: Question re: MMR in Denmark

You don't often get email from jeremy@jeremyhammond.com . [Learn why this is important](#)

Dear Dr. Christine Stabell Benn,

I have encountered conflicting information about which MMR vaccine formulations were used when in Denmark, and I hope you can take a moment to reconcile this contradiction for me. This relates to your May 2018 study, "[Revaccination With Measles-Mumps-Rubella Vaccine and Infectious Disease Morbidity: A Danish Register-based Cohort Study](#)", in which you and your colleagues state the following:

"In the beginning of the period Virivac was used. From mid-October 2008 Virivac was replaced by Priorix. From mid June 2013 Priorix was replaced by MMR VaxPro."

I understand "Virivac" to be the name under which Merck's MMRII was marketed in Europe, and that this uses the Enders Edmonston B measles strain. I know Priorix is GSK's product and uses the Schwarz strain.

However, the information you provided is contradicted by Hviid et al. in their March 2019 study "[Measles, Mumps, Rubella Vaccination and Autism: A Nationwide Cohort Study](#)", in which they state:

"The specific MMR vaccine used in the study period contained the following vaccine strains: Schwarz (measles, 2000 to 2007) or Ender's Edmonston (measles, 2008–2013)..."

Did Hviid et al. get it backwards? Did they mean that it was the Edmonton strain from 2000 through 2007 and the Schwarz strain from 2008-2013? I don't see how both your paper and Hviid et al can be correct, so could you please clear this up for me?

Thank you for your time!

Jeremy R. Hammond

Independent Journalist

JeremyRHammond.com

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One attachment • Scanned by Gmail



Appendix 2

Children's Health Defense Mail - FW: Re: SV: Questions one Data from MMR study

27/12/2024, 20:39



Jeet Varia <jeet.varia@childrenshealthdefense.org>

FW: Re: SV: Questions one Data from MMR study

Jeet Varia <jeet.varia@childrenshealthdefense.org>
To: Jeet Varia <jeet.varia@childrenshealthdefense.org>

From: Beth Clarkson <beth@bethclarkson.com>
Sent: Thursday, April 4, 2019 10:53 PM
To: jeremy@foreignpolicyjournal.com
Subject: Fwd: Re: SV: Questions one Data from MMR study

This email contains all the correspondence I've had with both the author and the publisher.

----- Forwarded Message -----

Subject:Re: SV: Questions one Data from MMR study

Date:Tue, 2 Apr 2019 17:27:41 -0500

From:Beth Clarkson <beth@bethclarkson.com>

Reply-To:beth@bethclarkson.com

To:Annals Annals <Annals@mail.acponline.org>

Thank you for the response. The author has refused to provide this data.

Dr. Clarkson

On 4/2/2019 12:54 PM, Annals Annals wrote:

Hello Dr. Clarkson,

You must request this data from the authors.

The data does not belong to the journal.

Let me know if you have any further questions.

Annals Staff

>>> Beth Clarkson <beth@bethclarkson.com> 3/30/2019 2:37 PM >>>

>

I have not heard from you regarding this matter. Could you please respond so that I know you have received my request. If you are not the appropriate editor.

Thank you.

Dr. Elizabeth Clarkson

On 3/18/2019 11:09 PM, Beth Clarkson wrote:

To the Editor,

I would like to make a formal request for an analyzable set of data regarding this study. I think that a Cox regression with attained age as the underlying time-scale qualifies as "crude associations between variables" particularly given that the results of this sophisticated regression model use supplemental material is in direct contradiction to the crude associations computed from the data published in the paper itself. (§

I am looking for a large cross tab table of all the variables used in this model. Personal identifying information such as birthdates and different variable combinations. It cannot be a violation of Danish law because if it were, then the publication of the data in the paper are table cells with only 1 or 2 individuals in them, they can be combined in some appropriate manner with adjoining cells.

I would also like to request an additional cross tabulation table for the data cases that were excluded from the analysis.

Thank you.

Dr. Elizabeth Clarkson
Senior Statistician
National Center for Aviation Research
Wichita State University

On 3/12/2019 2:49 AM, Anders Peter Hviid wrote:

We use survival analysis. Specifically, we use Cox regression with attained age as the underlying time-scale.

You will not be able to reproduce the HRs in the study by using autism counts from Figure 3 and the vaccination counts in the analyses and autism were estimated in proportional hazards models with attained age as outcome, including only the specific variable of interest as a covariate." (Second last paragraph in the Statistical Analysis section)

We are prohibited from sharing these data by Danish law.

Br Anders

Fra: Beth Clarkson [mailto:beth@bethclarkson.com]
Sendt: 9. marts 2019 14:01
Til: Anders Peter Hviid <All@ssi.dk>
Cc: annals@acponline.org
Emne: Re: Questions one Data from MMR study

Thank you for your prompt response. I'm sorry, but I did not take the time to introduce myself properly in my first email. My Ph.D. in statistics and work at Wichita State University in Kansas, USA.

While it's certainly understandable that you might not be able to respond to each data request with a specific subset, this count of each possible combination of the analyzed variables publicly available. I urge you to make your dataset publicly available to allow you to respond to all such inquiries with a link rather than a 'No'.

In my previous email, I did not make my the depth of my concerns regarding your computations of hazard ratios clear. *The published in Table 3 of the Supplemental material do not match my calculations of those same hazard ratios based on the paper.* In particular, your statement that "The highest risk for autism was conferred by ... being born in a late birth cohort" is your paper, the probability of being diagnosed with autism was highest for the earliest birth cohort and goes down successively.

Beth Clarkson

On 3/8/2019 2:04 AM, Anders Peter Hviid wrote:

Dear Beth,

We are getting many requests and questions on our study.

Its not possible to service each with detailed responses and specific datasets.

I hope you understand,

Anders

Den 8. mar. 2019 kl. 05.53 skrev Beth Clarkson <beth@bethclarkson.com>:

This is regarding your recently published paper "Measles, Mumps, Rubella Vaccination and Autism: A Nationwide Annals of Internal Medicine located at <https://annals.org/aim/fullarticle/2727726/measles-mumps-rubella-vaccinat-cohort-study#>

I have been exploring the data you published. I would like to request some additional data from your analysis. I'd of the autistic children with siblings with autism (838 children, 37 with autism) with respect to other early childhood be willing to provide me with that data? Thank you.

I am not understanding how you are computing the crude autism hazard ratios in Table 3 of your supplemental m For the sex difference you give 4.02 as the HR for boys relative to girls. I compute this as 3.98 from the data in yc (1257/320512).

For the different cohorts, I see falling rates of autism (see my table below) but you are reporting increasing hazan how you are computing those.

Thank you for your time and attention.

Beth Clarkson

Birth Cohort	Overall (657,461)	Vaccinated	Unvaccinated	Autism Unvaccinated	Autism Vaccinated	Total	% Autism Autistic	% Au Vaccinated Unva
1999-2001	168350	162513	5837	260	2614	2874	1.61%	
2002-2004	163478	153439	10039	158	1937	2095	1.26%	
2005-2007	165064	159059	6005	75	1152	1227	0.72%	
2008-2010	160569	150831	9738	32	289	321	0.19%	

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Beth Clarkson, Founder

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