hospitalized. Polyneuropathy (tingling in hands) is listed for IPV. Hyperventilation is unlisted. There is no biological plausible mechanism and the latency between the occurrence of hyperventilation and the vaccination(s) is relatively long, therefore this is assessed as unlikely related to IPV vaccination.

2011GB01025: A vasovagal reaction, also known as fainting (syncope) or imminent fainting (presyncope) is a relatively common reaction as a result of anxiety about, or the pain of any injection. This reaction is unrelated to the content of the vaccine but related to the vaccination procedure. In the SmPC a warning is given concerning fainting in section 4.4, 'Special warnings and precautions for use'.

2011DE62755: This case concerned a 2 year-old female who received a first dose of IPV. Within 10 days after vaccination the child showed increased frequency of infections but no treatment was given for this, nor was any serological examination performed. After one month the child displayed inflammation of eyes. Three months after vaccination she was hospitalized and diagnosed with idiopathic thrombocytopenic purpura (symptoms: bleeding out of mouth, petechiae and haematomas at legs). The patient recovered after treatment with prednisolone, betamethasone and clestamine. It was stated that 3 to 4 days before hospitalization the child presented with cold, cough and slight fever, and 3 weeks before hospitalization she suffered from high feverish infection of upper respiratory tract. Thrombocytopenia is associated with some vaccines (e.g. MMR), but no relation with IPV is known. The risk for thrombocytopenia is thought to be increased by acute viral infections. Therefore the case is considered unlikely related to the IPV vaccination.

2010DE45747: This case concerned a 4 year-old female who was vaccinated with separate injections of tetanus toxoid vaccine and IPV. About 10 minutes after vaccination, the patient developed hypotension, cough, retching and paleness persisting for 30 minutes. The physician diagnosed beginning of allergic shock. The patient was treated with Apis C1000 (homeopathic remedy) and autotransfusion. The patient recovered completely. Anaphylactic reactions are known to occur very rarely with injectable vaccines. It is advised that adequate medical treatment is readily available during vaccination. This is adequately addressed in the SmPC.

9.1.2 IPV-containing combination SAEs

2009-0200: One SAE report was assessed as medically significant by the reporter that described fever, malaise, pain in joints and knees. The patient experienced pain in joints, especially left knee, back and shoulders, and was unable to walk because the left knee failed. The patient recovered 17 hours later.Transient paralysis was also reported, but may be considered as inability to walk due to pain, as recovery was very

CAIP S.A.
María Bernarda Belay
Farmacéutica
Co - Directora Técnica
M.P. 15.148

quick. A causal relationship with the vaccination cannot be ruled out due to a close time-event relationship. On the other hand, there is also a lack of a plausible biological mechanism.

2009-1703: This case concerned a 59 year-old male who experienced Guillain-Barré Syndrome (GBS) with a latency of 12 days after vaccination with a Td-IPV combination vaccine. GBS is thought to be triggered by a viral infection in 3-4 weeks preceding the symptoms in two thirds of the cases (Van Koningsveld et al., 2002). The etiology of the other cases remains to be elucidated. Vaccination, mostly against influenza (Grabenstein, 2001), has been mentioned as a possible cause of GBS, but there is no concluding evidence. A causal relationship with the vaccination is considered unlikely.

2009-1741: A 52 year-old female started having complaints about one month after vaccination with Td-IPV. Symptoms began with scleral icterus and gradually deteriorated with liver abnormalities. After 2.5 months the diagnosis of choledocholithiasis was finally made. Gal bladder stones were surgically removed and the patient started to recover quickly. A causal relationship with the vaccination is considered unlikely.

2009-1327: This SAE report mentioned haemolytic anaemia 15 days after vaccination with a Td-IPV combination vaccine. This is an unlisted event. Due to lack of any further information, causality could not be assessed for this case.

2011-000392, 2011-000410 and 2011-000504: In a clinical trial performed by one of our partners outside of the EU, 3 SAEs with DTwP-IPV-Hib were reported. In two cases bronchopneumonia was reported, both one month after vaccination of infants. Due to the absence of a plausible biological mechanism to implicate the study vaccine, the investigators assessed the event as unlikely related in both cases. One of the infants subsequently developed congestive heart failure. The event is not known to occur with the study vaccine or IPV-containing vaccines in general. In the presence of temporality, a possible causal relationship to the vaccine cannot be ruled out but is considered unlikely. The third case concerned a hypotonic hyporesponsive episode, which is a rare but well-known adverse event after administration of infant DTwP-based combination vaccines. It is unlikely that the IPV-component is of major importance for this type of event. There is no need to change the SmPC.

9.2 Reported non-serious adverse events

9.2.1 Listed Non-serious Adverse Events

During the AP, 16 reports containing 44 AEs were received. Table 6 shows that 29 of 44 reported AEs are in the MedDRA SOC *"General disorders and injection site reactions"*. Most of the AEs in this SOC are listed, among them several injection site reactions (13). Furthermore, fever or elevated body temperature are reported 6 times.

9.2.2 Unlisted Non-serious Adverse Events

A few injection site reactions have been reported (5) that are unlisted: induration, inflammation, pruritus, and an unspecified reaction. Decreased mobility of the injected limb was reported twice. The few reactions reported here do not require a separate description in the SmPC.

All other unlisted non-serious AEs were reported only once. Two out of 44 AEs involved plain IPV, whereas the remaining 14 concerned the Td-IPV combination. There does not seem be any reason for concern about the safety of IPV. No changes in the SmPC are required.

Details of all non-serious AEs can be found in the line listing in Appendix 2.

9.3 Increased reported frequency

Based on the number of sold doses and the number of reported events, there is no apparent increase in the frequency of SAEs, as shown in Table 7. The absolute number of reports is very low relative to the number of sold doses.

Table 7 Reported frequencies of SAEs

Period	Number of sold doses	Number of reports with AEs (SAEs)	Per 100,000 sold doses:	
			Number of patients with SAE(s)	Number of SAEs
1997-2000	6,164,531	66 (21)	0.34	0.34
2001-2005	5,489,738	22 (22)	0.40	1.11
2006-2008	4,436,131	57 (27)	0.61	2.74
2009-2011	7,168,834	16 (19)	0.27	0.75

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M.P. 15.148

9.4 Other safety issues

Drug interactions

No suspected drug interactions were reported during the AP.

Overdose

During the AP no reports describing overdosing of IPV were received.

Drug abuse or misuse

During the AP no reports describing drug abuse or misuse of IPV were received.

Use in Pregnancy and Lactation

No reports on the use of IPV during pregnancy or lactation were received during the AP.

Use in Special Patient Groups

Plain IPV is in some countries, but not in The Netherlands, used as part of immunisation programmes for infants and children. It is also used for the immunisation of adults. The reports received involved adults as well as young children. No special patient groups could be identified that indicate a safety concern for the use of IPV.

Effect of long-term treatment

Not applicable.

10 Conclusions

The safety data collected for IPV during the AP do not give rise to any concern about the safety of the vaccine. The benefit of vaccination by far outweighs the observed adverse events. Also when used in IPV-containing combination vaccines the safety is not a concern.

The data presented is this PSUR do not lead to a proposal for adapting the SmPC of IPV.

CAIF S.A.
María Bernarda Belay
Farmacéutica
Co - Directora Técnica
M.P. 15.148

11 References

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APPENDIX 1. Reference safety information

CAIF S.A.
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M.P. 15.148

Summary of product characteristics

1 NAAM VAN HET GENEESMIDDEL

Poliomyelitisvaccin, suspensie voor injectie

2 KWALITATIEVE EN KWANTITATIEVE SAMENSTELLING

Eén dosis van 0,5 ml poliomyelitisvaccin bevat de volgende actieve bestanddelen:

Geïnactiveerd poliomyelitis virus type 1 (Mahoney)*	40 D-antigeen eenheden
Geïnactiveerd poliomyelitis virus type 2 (MEF 1)*	8 D-antigeen eenheden
Geïnactiveerd poliomyelitis virus type 3 (Saukett)*	32 D-antigeen eenheden

Voor hulpstoffen, zie 6.1.

*) Gekweekt op Vero-cellen.

3 FARMACEUTISCHE VORM

Suspensie voor injectie. Het product is een suspensie van door formaline geïnactiveerd en gezuiverd virus afgevuld als monodosis in ampullen of flesjes.

De kleur van het vaccin varieert van oranje-geel tot oranje-rood.

4 KLINISCHE GEGEVENS

4.1 Therapeutische indicaties

Actieve immunisatie tegen poliomyelitis.

4.2 Dosering en wijze van toediening

Eén dosis is 0,5 ml voor zowel kinderen als volwassen. Het vaccin wordt subcutaan of intramusculair toegediend.

Een primair vaccinatieschema bestaat uit 3 doses poliomyelitisvaccin, te ontvangen met een minimum interval van 4 weken. Kinderen krijgen deze tijdens de eerste 6 maanden van het eerste levensjaar. Na voltooiing van de eerste serie vaccinaties kan een booster dosis gegeven worden met een interval van tenminste 6 maanden. Indien

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María Bernarda Belay
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Co - Directora Técnica
M.P. 15.148

lokale autoriteiten een vaccinatieschema gebruiken dat voor de leeftijd van 2 maanden start, en/of indien het interval tussen de gegeven doses minder dan 8 weken is, dan dient een booster dosering toegediend te worden, maar niet voor de leeftijd van 9 maanden.

In Nederland worden kinderen bij voorkeur gevaccineerd volgens het Rijksvaccinatieprogramma met gecombineerd D(K)TP vaccin.

Personen die volledig tegen poliomyelitis zijn gevaccineerd en die vertrekken naar een gebied met verhoogd expositiegevaar aan poliomyelitis, wordt een revaccinatie met 1 dosis poliovaccin aangeraden ca. 1 maand voor vertrek, zeker wanneer de laatste enting 15 jaar of langer geleden heeft plaats gevonden.

4.3 Contra-indicaties

De algemene contra-indicaties die voor ieder vaccin gelden:

- ernstige reactie na eerdere vaccinatie met hetzelfde vaccin
- bekende overgevoeligheid voor een vaccincomponent.
- vaccinatie dient uitgesteld te worden bij ernstige met koorts gepaard gaande infecties

4.4 Bijzondere waarschuwingen en voorzorgen bij gebruik

De kleur van het vaccin varieert van oranje-geel tot oranje-rood. Vaccin met een duidelijk gele of violette kleur mag niet gebruikt worden.

Aangezien elke dosis sporen van neomycine, streptomycine en polymyxine B kan bevatten, is voorzichtigheid geboden bij de toediening van dit vaccin aan personen die overgevoelig zijn voor één van deze antibiotica.

Oudere kinderen en volwassenen kunnen flauwvallen na vaccinatie. Dit treedt meestal op korte tijd na vaccinatie en kan gepaard gaan met misselijkheid en braken. Indien flauwvallen bij eerdere vaccinaties is opgetreden of als er vóór of tijdens de toediening van het vaccin symptomen worden waargenomen die duiden op flauwvallen dan moet de persoon zittend of liggend worden gevaccineerd.

Poliomyelitis vaccin mag nooit intravasculair toegediend worden.

Zoals bij alle injecteerbare vaccins dient tijdens het toedienen adequate medische behandeling beschikbaar te zijn, voor het geval zich na toediening van het vaccin anafylactische reacties voordoen. Zonodig worden epinefrine injecties en corticosteroïden gegeven, gedoseerd naar leeftijd en/ of lichaamsgewicht.

Het is mogelijk dat de verwachte immuunrespons uitblijft na vaccinatie van patiënten met aangeboren of verworven immuunstoornissen.

Het potentiële risico op apnoe en de behoefte om de respiratoire functies gedurende 48-72 uur te monitoren dient in beschouwing te worden genomen in het geval van primaire immunisatie bij zeer premature kinderen (geboren ≤ 28 weken zwangerschap), in het bijzonder voor kinderen met een nog niet volledig ontwikkeld ademhalingsstelsel in de anamnese. Aangezien het profijt van vaccineren in deze groep kinderen groot is, dient de vaccinatie niet onthouden of uitgesteld te worden.

4.5 Interacties met andere geneesmiddelen en andere vormen van interactie

Poliomyelitisvaccin kan gelijktijdig met andere vaccins worden toegediend, mits het op verschillende injectieplaatsen wordt toegediend.

4.6 Zwangerschap en borstvoeding

Gegevens betreffende een groot aantal zwangerschappen met blootstellingenaan poliomyelitisvaccin laten geen nadelig effect zien op de zwangerschap of op de gezondheid van de foetus/het pasgeboren kind. Echter poliomyelitisvaccin dient alleen tijdens de zwangerschap toegediend te worden, wanneer er een nadrukkelijk risico op besmetting is.
Poliomyelitisvaccin kan worden gebruikt tijdens de borstvoedingsperiode.

4.7 Beïnvloeding van de rijvaardigheid en van het vermogen om machines te bedienen

Het is niet waarschijnlijk dat poliomyelitisvaccin een effect heeft op de rijvaardigheid en het vermogen om machines te bedienen.

4.8 Bijwerkingen

Op basis van postmarketing gegevens (spontane meldingen) is vastgesteld dat de volgende bijwerkingen kunnen optreden. De bijwerkingen die gemeld zijn na

CAIF S.A.
Maria Bernarda Belay
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Co - Directora Técnica
M.P. 15.148

vaccinatie met het poliomyelitisvaccin vonden meestal plaats gedurende de eerste drie dagen na vaccinatie en waren van tijdelijke aard.

Zenuwstelselaandoeningen

Zeer zelden (< 1/10.000): (Poly-) Neuropathie,

Ademhalingsstelsel-, borstkast- en mediastinumaandoeningen:

Ademhalingsproblemen (apnoe) bij zeer vroeg geboren kinderen (geboren ≤ 28 weken zwangerschap) (zie sectie 4.4).

Algemene aandoeningen en toedieningsstoornissen:

Lokale reacties:

Zelden (> 1/10.000, <1/1.000): Zwelling, roodheid en pijn op de injectieplaats.

Systemische reacties:

Zelden (> 1/10.000, <1/1.000)): Koorts, malaise.

4.9 Overdosering

Er zijn geen gevallen van overdosering gerapporteerd.

5 FARMACOLOGISCHE EIGENSCHAPPEN

5.1 Farmacodynamische eigenschappen

Farmacotherapeutische categorie: Virale Vaccins, ATC-code: J07BF03

In dieren (apen of ratten) resulteert de toediening van het vaccin in de vorming van neutraliserende antistoffen.

Immunogeniciteit in de mens

In mensen resulteert toediening van het vaccin in de vorming van antistoffen en het ontstaan van immunologisch geheugen; toediening van een tweede dosis van het vaccin resulteert in een secundaire respons gekarakteriseerd door een snelle stijging van antistof niveaus hetgeen wijst op de aanwezigheid van immunologisch geheugen.

FOLIO 1299

vaccinatie met het poliomyelitisvaccin vonden meestal plaats gedurende de eerste drie dagen na vaccinatie en waren van tijdelijke aard.

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Ademhalingsstelsel-, borstkast- en mediastinumaandoeningen:

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Lokale reacties:

Zelden (>1/10.000, <1/1.000): Zwelling, roodheid en pijn op de injectieplaats.

Systemische reacties:

Zelden (>1/10.000, <1/1.000)): Koorts, malaise.

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Er zijn geen gevallen van overdosering gerapporteerd.

5 FARMACOLOGISCHE EIGENSCHAPPEN

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CAIF S.A.
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M.P. 16.148

6 FARMACEUTISCHE GEGEVENS

6.1 Lijst van hulpstoffen

Formaldehyde (12,5 µg), 2-phenoxyethanol (2,5 mg), Medium 199 (0,1 ml) en verdunningsvloeistof en fosfaatbuffer (samen 0,08 ml) met de volgende samenstelling: natriumfosfaat, natriumchloride, kaliumchloride, magnesiumsulfaat, fenolrood en calciumchloride.

6.2 Gevallen van onverenigbaarheid

Niet van toepassing.

6.3 Houdbaarheid

24 maanden

6.4 Speciale voorzorgsmaatregelen bij bewaren

Bewaren bij 2 - 8 °C. Niet invriezen.

6.5 Aard en inhoud van de verpakking

Het vaccin is afgevuld in ampullen (type 1 hydrolytisch glas) of flesjes (type 1 hydrolytisch glas) afgesloten met een rubberen (latexvrij) stopje en een aluminium flip-off kapje en bevat 0,5 ml vaccin (voor 1 dosis).

6.6 Speciale voorzorgsmaatregelen voor het verwijderen.

Geen bijzondere vereisten.

7 HOUDER VAN DE VERGUNNING VOOR HET IN DE HANDEL BRENGEN

Bilthoven Biologicals B.V.

Antonie van Leeuwenhoeklaan 13

3721 MA Bilthoven

telefoon: 030 2742740

8 NUMMER(S) VAN DE VERGUNNING VOOR HET IN DE HANDEL BRENGEN

Poliomyelitisvaccin is in het register ingeschreven onder RVG 17642

9 DATUM VAN EERSTE VERGUNNING / HERNIEUWING VAN DE VERGUNNING

25 augustus 1994

10 DATUM VAN HERZIENING VAN DE TEKST

Laatste gedeeltelijke wijziging betreft rubriek 7, 5 januari 2012.

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M.P. 15.148

APPENDIX 2. Line listings

In the tables presented in this appendix the main characteristics of all individual reports concerning SAEs and unlisted AEs are shown. Some explanatory notes to the labels of the table are described below.

Explanatory notes to the line listings

Label	Explanatory notes
ID	Identity number of the case.
Country	Country in which the case occurred.
Source	Source of the report (spontaneous, clinical studies, literature, other).
SAE	yes = serious, no = non-serious.
Receive date	Date on which the report was received by NVI.
Age	Age of the patient (unk = unknown).
Sex	Sex of the patient (f = female, m = male).
Vacdate	Date of administration of the vaccine (dd-mm-yyyy).
Vaccine dose	Number of dose in the possible series of scheduled vaccinations.
Other vaccine (+dose)	Other vaccines administered simultaneously and, if applicable, the number of dose in the possible series of scheduled vaccinations.
Latency	Interval between vaccination and the first signs / symptoms (unk = unknown).
Duration	Duration of the adverse event (unk = unknown).
Signs / symptoms	All single signs and symptoms that were reported. Unlisted events are marked with an asterisk (*).
Outcome	Rec'd = recovered, rec'ing = recovering.
Causality	Causality evaluated by NVI.
Medical intervention	If known, hospitalization and/or medication given to treat the event(s) is listed.
Comments	Any other relevant information.

Table A2-1 Line listing of all spontaneously reported SAEs (unlisted events are marked with an asterisk(*)

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
2009-1402	DE	spontaneous	yes (medically significant)	16-Jun-2009	< 1 year / unk	unk	IPV 1	unk	directly	unk	somnolence*	rec'd	possible	none	Directly after the vaccination, child became quiet, did not want to play anymore and was sitting on the sofa. Linked to 2009-1403.
2009-1403	DE	spontaneous	yes (medically significant)	16-Jun-2009	< 1 year / unk	unk	IPV 2	unk	directly	unk	somnolence*	rec'd	possible	none	Directly after the vaccination, child became quiet, did not want to play anymore and was sitting on the sofa. Symptoms were worse compared to first vaccination. Linked to 2009-1402.
2009-0200	DE	spontaneous	yes (medically significant)	10-Feb-2009	49 f	22-Jan-2009	Td-IPV 2	unk	8 hours 8 hours 8 hours 8 hours 8 hours	17 hours	transient paralysis* arthralgia* myalgia* fever influenza-like illness*	rec'd rec'd rec'd rec'd rec'd	possible possible possible possible possible	ibuprofen	A previous vaccination was tolerated well. Patient was unable to walk because the left knee failed. The transient paralysis may be considered inability to walk due to pain.

CAIF S.A.
María Bernarda Belay
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Co - Directora Técnica
M.P. 16.148

1361

Periodic Safety Update Report 01 January 2009 – 31 December 2011

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
2009-1703	CH	spontaneous	yes	03-jul-2009	59 m	11-Mar-2009	Td-IPV	MMR-V, hep-AB, oral typhoid vaccine, yellow fever vaccine (YF vaccine administered on 13-Mar-2009).	12 days	unk	Guillain-Barré syndrome* fatigue*	almost rec'd	unlikely unlikely	hospitalization, i.v. immunoglobulins	History of poliomyelitis at the age of 6.
2009-1741	DE	spontaneous	yes	07-jul-2009	52 f	16-apr-2009	Td-IPV 1	anti-tetanus immunoglobulin	1 month	unk	choledocholithiasis*	rec'ing	none	hospitalization, small gall bladder stones extracted	
C055	IN	clinical	yes	09-Dec-2009	6 mo / M	20-Apr-2009	IPV	-	1 day 1 day 1 day 2 days 2 days 2 days 2 days	unk	loose motions* vomiting* diarrhoea* irritable* diet refusal* fever tachycardia*	rec'd	none	hospitalisation, ORS, paracetamol, intravenous fluids, antibiotics, antacids and antiemetics	Judged as unrelated
D029	IN	clinical	yes	09-Dec-2009	6 mo / M	18-Apr-2009	IPV	-	9 days 10 days	unk	watery diarrhoea* vomiting*	rec'd	none	hospitalisation, intravenous fluids, antiemetics, and antibiotics	Judged as unrelated

Periodic Safety Update Report 01 January 2009 – 31 December 2011

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
D080	IN	clinical	yes	09-Dec-2009	9 mo / M	20-Apr-2009	IPV	-	9 days	unk	watery diarrhoea* fever	rec'ing	none	hospitalisation, intravenous fluids and antibiotics	Diagnosis viral gastroenteritis with severe dehydration, judged as unrelated
2009-1327	FR	sponta-neous	yes	13-Nov-2009	unk / unk	2003	Td-IPV	unk	15 days	unk	haemolytic anaemia*	unk	unable to assess	unknown	No detailed or follow-up information available
2010DE 04549	DE	sponta-neous	yes (medically signifi cant)	04-Feb-2010	32 y / F	22-Jan-2010	IPV	-	3 days	unk	acute hearing loss*	not rec'd	unable to assess	unknown	No detailed or follow-up information available
2010DE 52935	DE	sponta-neous	yes	13-Aug-2010	44 y / F	24-Jan-2000	IPV	Td-pur; before also tetanus toxoid and OPV, later also Encepur (TBE vrus) and Stamaril (yellow fever)	3 y	unk	fibromyalgia* muscular weakness* dyskinesia* hyporeflexia* muscle twitching* gait disturbance* hypopallaesthesia* tendon pain* fatigue* walking aid use* autoimmune thyroiditis* migraine*	not rec'd	unlikely	Hospitalisation	First symptoms of generalised muscle weakness were already present in 1990 which had worsened in 2004. The latency is considered too long for a causal relation.

CAIF S.A.
María Bernarda Belay
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Co - Directora Técnica
M.P. 15.148

1302

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
2010DE67831	DE	spontaneous	yes	14-Oct-2010	32 y / F	06-Apr-2009	IPV 1	DTP vaccine (also hepB vaccine on 25-Mar-2009 and TBE-virus vaccine on 15-May-2009)	3.5 months	unk	breast abscess*	rec'd	unlikely	Hospitalisation, repeated surgical interventions	
2010DE80154	DE	spontaneous	yes	26-Nov-2010	47 y / F	21-Oct-2010	IPV 1	Diphtheria toxoid	< 1 day 1 day 9 days 9 days	unk	pruritus* eye pruritus* paraesthesia (tingling hands) hyperventilation*	rec'd	possible possible unlikely unlikely	Hospitalization	The patient was hospitalized for hyperventilation
2011GB01025	GB	spontaneous	yes (medically significant)	09-Feb-2011	unk / F	25-Jan-2011	IPV	MenC conjugate vaccine, DPT vaccine	5 min	unk	cyanosis* pallor*	rec'd	probable probable	-	A diagnosis of vasovagal reaction was made (presyncope).

Periodic Safety Update Report 01 January 2009 – 31 December 2011

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
2011DE 62755	DE	spontaneous	yes	02-Sept-2011	2 years / F	14-Jan-2011	IPV 1	-	3 months 1 month 10 days 2.5 month	unk	ITP* eye inflammation* infection susceptibility increased* upper respiratory tract infection*	rec'd	unlikely unlikely unlikely unlikely	Hospitalization, predisolone, betamethasone, clestamine	An infective cause 3 weeks prior may have triggered the event.
2010DE 45747	DE	spontaneous	yes (medically significant)	13-Sept-2011	4 years / F	19-Jun-2010	IPV	Tetanus vaccine	10 minutes	unk	hypotension* cough* retching* pallor*	rec'd	probable possible probable probable	Apis C1000 (homeopathic substance), autotransfusion	Beginning of allergic shock was diagnosed.
2011-000392	IN	clinical	yes	10-Aug-2011	10.5 wks / M	21-Apr-2011	DTwP-Hib-IPV 1	-	1 month	unk	bronchopneumonia*	rec'd	unlikely	Hospitalization, IV fluids isolyte P, inj. coamoxiclav, inj. amikacin, nebulization with adrenalin.	As per investigator causality is assessed as unlikely.
2011-000410	IN	clinical	yes	10-Aug-2011	6 wks / M	24-May-2011	DTwP-Hib-IPV 1	-	1 day	unk	hypotonic hyporesponsive episode*	rec'd	certain	Hospitalization, IV Kidral P, ceftriaxone, ibuprofen, paracetamol, gardenal,oxygen, multivitamin drops, syp. osteocal.	As per investigator causality is assessed as certain. HHE is known to occur with DTwP based combination vaccines.

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FOLIO 1303

ID	Country	Source	SAE	Receive date	Age Sex	Vacdate	Vaccine dose	Other vaccine (+ dose)	Latency	Duration	Signs / symptoms	Outcome	Causality	Medical intervention	Comments
2011-000504	IN	clinical	yes	10-Aug-2011	14 wks / F	22-Jun-2011	DTwP-Hib-IPV 3	-	1 month	unk	bronchopneumonia* congestive heart failure*	rec'd	unlikely unlikely	Hospitalization, inj. coamoxiclav, inj. amikacin, paracetamol. Inj. piperacillin +tazobactam, inj. netilicimin, inj. furiosemide, enalapril, digoxin, meropenem	As per investigator, no plausible mechanism for causal relation, causality is assessed as unlikely.