1. Supporting Experimental data for Salk (10-2-5) Single Dose

Polio Salk vaccine 10-2-5 With Adjuvant		
Type 1	**Type 2**	**Type 3**
1	**5**	**7**
3	**5**	**6**
4	**9**	**3**
4	**8**	**2**
3	**9**	**5**
1	**7**	**7**
3	**9**	**7**
3	**11**	**6**
2	**9**	**5**
1	**10**	**6**

2. Supporting Experimental data for Salk (10-2-12) Single Dose

Polio Salk vaccine 10-2-12 With Adjuvant		
Type 1	**Type 2**	**Type 3**
3	**6**	**9**
2	**10**	**9**
4	**9**	**8**
1	**9**	**10**
2	**9**	**11**
2	**7**	**9**
4	**9**	**9**
3	**8**	**11**

1	**10**	**10**
2	**6**	**12**

3. Supporting Experimental data for Salk (5-8-10) Single Dose

Polio Salk vaccine 5-8-10 With Adjuvant		
Type 1	**Type 2**	**Type 3**
1	**8**	**9**
2	**10**	**7**
1	**9**	**8**
0	**11**	**10**
2	**9**	**11**
1	**10**	**8**
0	**9**	**9**
3	**11**	**12**
0	**9**	**10**
1	**8**	**7**

4. Supporting Experimental data for Salk (7.5-16-10) Single Dose

Polio Salk vaccine 7.5-16-10 With Adjuvant		
Type 1	**Type 2**	**Type 3**
1	**11**	**8**
2	**12**	**9**
1	**10**	**7**
4	**11**	**10**
3	**10**	**8**
0	**9**	**11**
3	**9**	**10**
2	**11**	**12**
0	**12**	**9**
1	**10**	**7**

5.

Positive Reference control **(IPV08-143)**		
Type 1	**Type 2**	**Type 3**
1	**8**	**4**
2	**9**	**5**
0	**2**	**2**
0	**3**	**0**
1	**4**	**6**
2	**4**	**3**
2	**5**	**2**
3	**9**	**5**
1	**6**	**3**
3	**6**	**5**

8. A method according to any one of claims 1 to 7, wherein the Enteroviral particles are of an Enterovirus of polioviruses.

9. A method according to claim 8, wherein the Enteroviral particles comprise polioviruses of the Sabin serotypes 1, 2 and 3.

10. A method according to claim 8, wherein the Enteroviral particles comprise polioviruses of Salk serotypes IPV type 1 (Mahoney strain), IPV type 2 (MEF-1 strain); and/or IPV type 3(Saukett strain).

11. A method according to any one of claims 1 to 10, wherein the vaccine is a dose reduced Inactivated Polio Vaccine (IPV).

12. A method according to claims 1 to 11, wherein the dose reduced Inactivated Polio Vaccine comprises:

i) inactivated poliovirus type 1 at a dose less than 15 D-antigen units instead of standard dose of 42DU; and/or

ii) inactivated poliovirus type 2 at a dose less than 18 D-antigen units; and/or

iii) inactivated poliovirus type 3 at a dose less than 15 D-antigen units instead of standard dose of 32DU.

13. A method according to claims 1 to 12, wherein said dose reduced Inactivated Polio Vaccine can be selected from a group of

i) Sabin single dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 5-16-10

ii) Sabin two dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 5-16-10

iii) Sabin single dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 2.5-8-5

iv) Sabin two dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 2.5-8-5

v) Sabin single dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 5-8-10

vi) Sabin two dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 5-8-10

vii) Salk single dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 7.5-16-10

viii) Salk two dose composition having Sabin Type 1,Type 2,Type 3 combination selected from 7.5-16-10

ix) Salk single dose composition having Salk Type 1 ,Type 2,Type 3 combination selected from 8-2-5

x) Salk two dose composition having Salk Type 1 ,Type 2,Type 3 combination selected from 8-2-5

xi) Salk single dose composition having Salk type 1, Type 2, Type 3 combination selected from 10-2-5

xii) Salk two dose composition having Salk type 1, Type 2, Type 3 combination selected from 10-2-5

xiii) Salk single dose composition having Salk type 1, Type 2, Type 3 combination selected from 10-2-12

xiv) Salk two dose composition having Salk type 1, Type 2, Type 3 combination selected from 10-2-12

xv) Salk single dose composition having Salk Type 1 ,Type 2,Type 3 combination selected from 5-2-5

xvi) Salk two dose composition having Salk Type 1 ,Type 2,Type 3 combination selected from 5-2-5

14. A method according to claims 1 to 13, wherein said method for preparing a dose reduced inactivated Polio vaccine containing Salk or Sabin polioviruses comprises the steps of:

a) producing a medium containing the polioviruses;

b) purification of the polio viruses from the medium;

c) stabilization of purified polioviruses by addition of M-199 medium containing glycine;

d) inactivation of the polio viruses by using formaldehyde 0.025% at 37°C for 5 to 13 days in presence of TRIS buffer at a concentration between 30mM to 60mM to prevent or reduce aggregation of the poliovirus particles thereby reducing the D-antigen losses post inactivation by 8 to 10 fold as compared to phosphate buffer ; and

e) adsorption of inactivated polioviruses on Alum hydroxide adjuvant having concentration between 2 to 2.5 mg/dose, whereby percentage adsorption on Alum hydroxide is greater than 95% for Type 1,Type2 and Type 3.

15. A method according to claims 1 to 13, wherein said method for preparing a dose reduced inactivated Polio vaccine containing Salk or Sabin polioviruses comprises the steps of:

a) producing a medium containing the polioviruses;

b) purification of the polio viruses from the medium;

c) stabilization of purified polioviruses by addition of M-199 medium containing glycine;

d) inactivation of the polio viruses by using formaldehyde 0.025% at 37°C for 5 to 13 days in presence of TRIS buffer at a concentration between 30mM to 60mM to prevent or reduce aggregation of the poliovirus particles thereby reducing the D-antigen losses post inactivation by 8 to 10 fold as compared to phosphate buffer ; and

e) adsorption of inactivated polioviruses on Alum hydroxide adjuvant having concentration between 2 to 2.5 mg/dose, whereby percentage adsorption on Alum hydroxide is greater than 95% for Type 1 and Type 3.

16. A method according to claims 1 to 15, wherein said dose reduced Salk or Sabin Inactivated Polio Vaccine does not comprise Type 2.

17. The method of claims 1-16,wherein a multivalent vaccine consisting of dose reduced IPV can comprise of one or more antigens from a pathogen selected from a list consisting of: *Haemophilus influenzae* b, *Neisseria meningitidis* type A, *Neisseria Meningitidis* type C, *Neisseria meningitidis* type W, *Neisseria meningitidis* type Y, *Neisseria meningitidis* type X, *Neisseria meningitidis* type B , Streptococcus pneumoniae, Streptococcus agalactiae Salmonella typhi ,Hepatitis A, Hepatitis B ,RSV, Hepatitis C, diphtheria toxoid, tetanus toxoid, whole cell pertussis, acellular pertussis, Staphylococcus aureus, anthrax, Vibrio cholera, Zika, Ebola, Chikungunya, dengue, malaria, measles, mumps, rubella, BCG, Japanese encephalitis, Rotavirus, smallpox,Shigella, yellow fever, typhoid, CMV, Shingles, Varicella virus, HPV, HSV , and HIV.