

## Comparison of Currently Manufactured Oral Cholera Vaccines

Updated November, 2016

Vaccine	Dukoral	ORC-Vax and mORC-Vax	Shanchol	Euvichol
<b>Manufacturer</b>	Valneva (Lyon, France)	Vabiotech (Vietnam)	Shantha Biotechnics (India) / Sanofi Pasteur	EuBiologics Co., Ltd (Korea)
<b>Description</b>	Monovalent inactivated vaccine	Bivalent (serotypes O1 & O139) inactivated vaccine	Bivalent (serotypes O1 & O139) inactivated vaccine	Bivalent (serotypes O1 & O139) inactivated vaccine
<b>Components</b>	Killed whole-cells of <i>V. cholerae</i> O1 (Classical and El Tor biotypes) and recombinant B-subunit of cholera toxin	Killed whole cells of <i>V. cholerae</i> O1 (Classical and El Tor biotypes) and <i>V.cholerae</i> O139	Killed whole cells of <i>V. cholerae</i> O1 (Classical and El Tor biotypes) and <i>V. cholerae</i> O139	Killed whole cells of <i>V. cholerae</i> O1 (Classical and El Tor biotypes) and <i>V. cholerae</i> O139
<b>Recommended age</b>	2 years and older	1 year and older	1 year and older	1 year and older
<b>Delivery</b>	Oral	Oral	Oral	Oral
<b>Doses</b>	2 given $\geq$ 1 week apart	2 given $\geq$ 2 weeks apart	2 given $\geq$ 2 weeks apart	2 given $\geq$ 2 weeks apart
<b>Buffer solution</b>	Buffer dissolved in 75 ml (2-6 years old) or 150 ml (>6 years old) water	Not required	Not required	Not required
<b>Booster dose</b>	Every 2 years (every 6 months for children 2-5 years)	Every 3 years	Every 3 years (more research needed)	Every 3 years (more research needed)
<b>Licensure</b>	International (1991)	Vietnam (1997/2009)	India (2009)	Korea (2015)
<b>WHO pre-qualification</b>	Yes (2001)	No	Yes (2001)	Yes (2015)
<b>Public sector price (per dose, USD)</b>	\$5	\$1.25	\$1.85	\$1.85
<b>Storage temperature</b>	2 to 8 °C	2 to 8 °C	2 to 8 °C	2 to 8 °C
<b>Packaging</b>	Single dose 3 ml/vial, 2 doses per package	Single dose 1.5 ml/vial and multiple dose vial (5 doses per vial)	Single dose 1.5 ml/vial	Single dose 1.5 ml/vial