



PPUKM PHARMACY BULLETIN

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MENVEO VERSUS MENCEVAX : SIMILARITIES & DIFFERENCES by PRP Farah & Ms Izyan

Meningococcal disease is a contagious bacterial disease caused by *Neisseria meningitidis*; also referred to as cerebrospinal meningitis. *N. meningitidis* inhabits the mucosal membrane of the nose and throat, where it usually causes no harm. Up to 5-10% of a population may be asymptomatic carriers. It is spread by person-to-person contact through respiratory droplets of infected people. It occurs sporadically throughout the world with seasonal variations and accounts for a proportion of endemic bacterial meningitis. However, the highest burden of the disease is due to the cyclic epidemics occurring in the African meningitis belt. The main clinical forms include the meningial syndrome, the septic form and pneumonia. The **onset of symptoms** is sudden and death can follow within hours. In as many as 10-15% of survivors, there are persistent neurological defects, including hearing loss, speech disorders, loss of limbs, mental retardation and paralysis. Meningococcal disease however, can be prevented by vaccination ^[1].

Brand	MENCEVAX® by GSK 	MENVEO® by Novartis 
Content/Active Ingredient	Quadrivalent Meningococcal polysaccharide meningococcal vaccine) (MPSV4)	(Quadrivalent Meningococcal oligosaccharide conjugate vaccine) (MCV4)
Price (RM)/inj	62.50	100
Dosage & Duration for next dose	Adults and Children ≥5 years: Administered as a single 0.5 mL inj every 2-5 years. Second dose may be administered 2 months after the 1st dose.	Adults and Children ≥11 years: Administered as a single 0.5 mL inj every 2-5 years. Second dose may be administered 2 months after the 1st dose. Elderly: There are limited data in individuals 56-65 years and there are no data in individuals >65 years. People with persistent complement component deficiencies, functional or anatomic asplenia, including sickle cell disease, functional or anatomic asplenia, including sickle cell disease : 2mo – 18 mo: Give at 2, 4, 6 and 12–15 mo. If risk continues, give initial booster after 3 years followed by boosters every 5 years
Indication	Preferred for those who need the vaccine once only eg performing Hajj	Preferred for frequent repetitive exposure to eg frequent umrah/hajj visitors, immunosuppressed patient, asplenic patient, expats and frequent travellers to countries of the meningitis belt.
Booster dose	No available data	Advantage of having antibody titers that remain longer and that immune memory installed. However, no specific time range had been given for the booster dose
Immunogenicity & duration of immunity	Not immunogenic in infants (no data for age <2 years old). Immunity lasts for 3 years and shorter duration compared to Menveo vaccine.	Immunogenic in infants (currently expanding for 2 month and above) – off label used. Immunity lasts for 3-5 years, longer duration . Potential for herd protection.
Hyporesponsiveness with repeated dosing	Patient became hyporesponsive when given repeated dose.	No hyporesponsiveness detected. Antibody titers remain longer
Safety in pregnancy	Category C ^{6,7} Either studies in animals have revealed adverse effects on the fetus (teratogenic/embryocidal/other) & no controlled studies in women/studies in women & animals are not available. Drugs should be given only if the potential benefit justifies the potential risk to the fetus	Category B ^{6,7} Either animal-reproduction studies have not demonstrated a fetal risk but there are no controlled studies in pregnant women or animal-reproduction studies have shown adverse effect (other than a decrease in fertility) that was not confirmed in controlled studies in women in the first trimester (and there is no evidence of a risk in later trimesters).

SIMILARITIES OF MENVEO AND MENCEVAX

- Indicated for Meningococcal meningitis and covers serotypes A, C, W135 and Y
- Available in Kedai Farmasi (Non-formulary item) but free for PPUKM staff. Comes as 0.5mL/dose inj.
- Can be used for Hajj/Umrah. Given as intramuscular injection preferably into the deltoid muscle.
- The WHO vaccination booklet is available at 7th floor, UKMSC at the price of RM5/booklet.

Mencevax ACWY is currently out of stock in Kedai Farmasi, PPUKM.



REFERENCES:

1. WHO. Global alert and response (GAR): meningococcal disease. <http://www.who.int/csr/disease/meningococcal/en/> (accessed 16 February 2014).
2. Immunization Action Coalition. Ask the experts: meningococcal disease. http://www.immunize.org/askexperts/experts_men.asp (accessed 16 February 2014).
3. Vandercam PB, Brussels UC, Van Gompel F, Antwerp IT. 9th National seminar on travel medicine: conjugate or polysaccharide quadrivalent meningococcal vaccine: no easy answer. Nov 2011.
4. Wee NS, Ruslan M. Vaccination lists and schedule. Drug Information Centre. PPUKM. April 2013.
5. <http://www.cdc.gov/vaccines/vpd-vac/mening/who-vaccinate.htm>
6. Micromedex
7. Product insert of MENVEO & MENCEVAX-ACWY

WHO NEEDS THE VACCINE?^[2,5] :

- ◆ All adolescents age 11-12 years
- ◆ All previously unvaccinated adolescents age 13 through 18 years
- ◆ All previously unvaccinated 1st-year college students age 19 through 21 years who are or will be living in a residence hall
- ◆ All people age 2 months and older with anatomic or functional asplenia, or persistent complement component deficiency.
- ◆ All people age 2 months and older who travel to or reside in countries where meningococcal disease is hyperendemic or epidemic (for eg. sub-Saharan Africa or to Mecca, Saudi Arabia for the annual Hajj)
- ◆ Any person working as a microbiologist with routine exposure to isolates of *N. meningitidis*
- ◆ Military recruits and,
- ◆ Any other person wishing to decrease their risk for meningococcal disease.

ANNOUNCEMENTS FROM PHARMACY DEPARTMENT

SHORT EXPIRY INJECTION PANTOPRAZOLE (CONTROLOC) 40MG

Dear Specialists/Doctors,

Please be informed that we have 2580 vials of Inj Pantoprazole (Controloc) 40mg expiring in **June 2014**. Supply of Inj Esomeprazole (Nexium) will be put on hold until all the stocks of Inj Pantoprazole (Controloc) have been used up. This is to avoid wastage. Thank you.

Approved indication : For acute bleeding only

Prescriber : Category A* : Consultants & Emergency Department only

Dose : Prevention of rebleeding in peptic ulcer bleed : 80mg as a bolus infusion over 30 mins, followed by 8mg/hr continuous infusion over 3 days.

Administration : 2-min infusion : Reconstitute with 10 mL of NS (4mg/mL), may be administered intravenously over at least 2 mins.

15-min infusion : Infuse over 15 min at a rate not to exceed 7mL/min (3mg/min).

8mg/hr continuous infusion : Dilute 80mg in 100 mL NS, rate 10 mL/hr

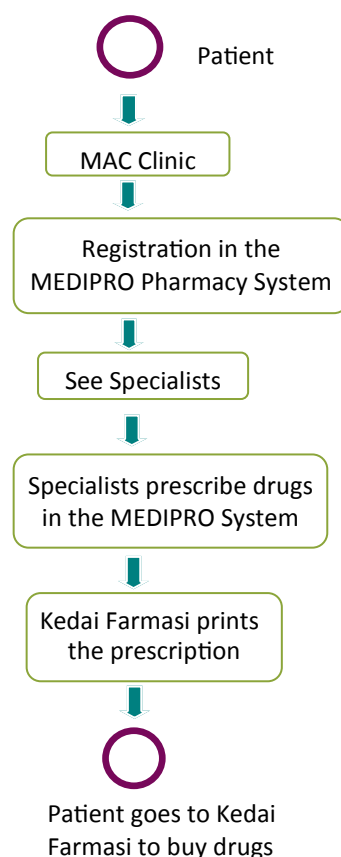


AVAILABILITY OF MAC CLINIC DRUGS IN KEDAI FARMASI PPUKM

With effective from **2nd January 2014**, all purchases and supply of drugs for Medically Assisted Conception (MAC) Clinic will be carried out by Pharmacy Department, UKMMC. In addition, all counseling matters pertaining to the drugs will be given by our trained pharmacists starting **4th February 2014**. Below are the list of drugs currently available in Kedai Farmasi.

NO	DRUGS	PRICE PER UNIT (RM)
1	Follitropin Beta (Puregon) 50 IU Inj	65.00
2	Follitropin Beta (Puregon) 100 IU Inj	129.60
3	Follitropin Beta (Puregon) 300 IU Inj	388.00
4	Follitropin Beta (Puregon) 600 IU Inj	777.60
5	Follitropin Alfa (Gonal-F) 75 IU Inj	79.00
6	Follitropin Alfa (Gonal-F) 300 IU Inj	375.50
7	Follitropin Alfa (Gonal-F) 450 IU Inj	560.00
8	Choriogonadotropin Alpha (Ovidrel) 250 ug Inj	82.50
9	Human Chorionic Gonadotropin (Pregnyl) 5000 IU Inj	41.80
10	Synthetic Decapeptide Ganirelix (Orgalutran) 0.25mg Inj	125.00
11	Cetrorelix Acetate (Cetrotide) 0.25mg Inj	131.80
12	Progesterone (Utrogestan) 100mg Cap	40.20 (30's)
13	17B Estradiol 1mg/Dydrogesterone 10mg (Femoston) 1/10 Tab	45.50 (28's)
14	17B Estradiol 1mg/Dydrogesterone 5mg Femoston 1/5 Tab (Conti)	50.50 (28's)
15	Dydrogesterone (Duphaston) 10mg Tab	40.00 (20's)
16	Tribulus Terrestris L Bulgaricu (Tribestan) 250mg Tab	159.50 (60's)

Flow Chart of Drug Supply for Patients from MAC Clinic



A publication of :

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