



NewsLetter

院訊

*Pharmaceutical Update:
Overview of the Three COVID-19 Vaccines
Supplied to Hong Kong in 2021*

(As of February 5th, 2021)

*Introducing St. Paul's Hospital
Elderly Day Care Centre*



社 會 滿 祥 和

家 庭 諧 主 愛

鼠去牛來欣大治
龍騰虎躍奮新程

在此，我先祝賀各位
萬事如意，身體健康。

修女的話

過去一年，全世界也受盡疫情帶來的煎熬。年頭開始，人心惶惶。市民紛紛去撲口罩、搶購防疫用品。亦由於疫情持續超過一年，經濟漸轉蕭條，不少人因而失業，失去生活的動力，失去對生命的熱誠和希望。因此，我想跟大家分享一篇文章的節錄。

俗語有云：「樹高千尺不忘根，人若風光不忘恩」這兩句說話的深層含義對我們每個人而言都是非常值得學習。樹木生長得再高，亦不能忘記自己是扎根在地底下，亦不能忘記大地對它的呵護；一個人無論後來變得有多風光，亦不應該忘記那些曾經幫助過自己、對自己有恩情的人。明事理的人應該都懂得此道理。對大樹而言，如非大地、土壤等對它的呵護滋養，就不能長得高大且枯萎死去。對人而言，如果生活中沒有他人相助，人就無法好好活下去。每個人多多少少都有受到別人的幫助，相信無人會例外，有時候正因為有別人的幫助，人才得以度過難關、走出困境。所以無論何時，我們都應該懷有一顆知恩圖報的心。但在現實生活中，總有些人在富有或風光之後就變得忘恩負義，甚至是六親不認，更不會對那些曾經對自己伸出援手的人感恩。因此我們一定要學會感恩、懂得感恩，而且要堅信，懷有一顆感恩之心的人，無論在什麼時候，都會有一群人願意對自己伸出援手。與人相處要真誠，認真對待自己，誠懇對待他人。做人，要滴水之恩，當湧泉相報，點滴恩惠，應沒齒不忘。做事，要真心，要低調善良，以誠實為本，不能背信棄義。對生活，要充滿信心；對朋友，要真心誠意；對家庭要寬宏大量和包容；對恩人，要知恩圖報。

人最應該感謝的是天主，祂創造美好的世界給予我們享用，賜予我們寶貴的生命，每個人有不同的能力才幹，建設社會、造福人群，建立家庭。人生最珍貴的朋友，就是耶穌基督，祂的到來是為了顯示天父的慈愛，祂為愛我們而甘願犧牲性命，祂經歷磨難，被捨棄，甚至死亡，為了指示我們通往永生的途徑，帶給我們永恆的生命。

在疫情期間，我們非常感謝每一位醫護人員。他們堅守崗位，不辭勞苦地治癒和照顧病人。他們的努力就像土壤一樣，既供給營養，又讓大樹好好扎根在地上。故此，我們要學會活在當下，感恩沿途有不同人的支持和幫助。大家要好好保重身體，繼續活出精彩美麗的人生。願光榮歸於父，及子及聖神，起初如何，今日亦然，直到永遠。亞孟。

再次祝福各位工作順利、主恩滿溢。
主佑各位！

張柱見修女



Overcoming the COVID Challenge



Dr. William Ho
Chief Medical Executive

This time last year, the joy of the Chinese New Year was overshadowed by the fear of this novel Coronavirus. Having gone through SARS in 2003, memories were fresh on the devastation on society and human lives. It was with slight relief that COVID-19 was not as deadly as its cousin. But hardly anyone could have foreseen that we would still be in epidemic mode come another Chinese New Year. Such long-drawn battle not only costs society dearly, but also forces everyone to suffer continuously for social distancing, suspension of classes and travel, and anxiety over health and wealth. Here in St. Paul's, we have treaded very carefully in terms of infection control vs patient needs and business. Given the stealth nature of the virus and silent community transmission, it is only a matter of chance and luck which hospital would see another confirmed case either as patient or as staff. All we can do is to adhere to available science, prudent judgment, and continuous vigilance. By God's grace, there had not been a major problem here, despite our rather generous visiting policy of 12 hour per day to address patient needs. While requiring all inpatients to produce negative COVID PCR results upon admission, we have not adopted regular rapid antigen tests for visiting doctors in the light of false negative rate of available products. I wish to thank all staff and visiting doctors for complying to our policies to keep the hospital safe.

Patient activities in the past year had been hard hit. But thanks to everybody's effort, we are probably already better than most. There were big increases in CT and MRI referrals under the public-private partnership (PPP) programs from HA which was over-burdened by COVID-related work. Renal dialysis services and cardiac work remained busy. Substantial number of referrals under the new PPP programs in Cystoscopy and CA Breast also helped. And obstetrics received a boost early in the year when some patients who initially planned to deliver in public hospitals turned to private care. Meanwhile, we continue in our effort to ensure high quality care. CPR audit revealed 100% attendance by RMO within 5 minutes and high ROSC rate at 64% for the year 2020, while PCI audit showed very high success rate of 99% and few complications. CME activities had been resumed in our brand new Auditorium, with social distancing arrangements plus online participation.

In the coming months, we look forward to contributing to the fight against COVID through supporting the Government's vaccination program. We will turn an unopened ward to be a Community Vaccination Centre in the hospital, which also makes it easier for staff members or visiting doctors who wish to take the vaccine. We will also help to promote vaccination, so that herd immunity in the community can be established earlier to end our collective ordeal. *Let me end by wishing everybody good health, and a most successful Year of the Ox!*

Introducing Elderly Day Care Centre



頤康天地

Elderly Day Care Centre

頤康天地

是聖保祿醫院首間專為長者提供日間護理服務的中心，透過與醫院內不同專業團隊的協作，為家居長者提供全面的醫護復康照顧。頤康天地為長期病患、身體機能中度至嚴重缺損或患認知障礙症的長者，提供日間護理及復康服務。並倡導長者的自我健康管理及預防疾病。讓長者能保持身體功能及提升生活質素，讓他們繼續在社區內享受豐盛生活。同時支援其家人及照顧者。

Elderly Day Care Centre (EDCC)

is the first in St. Paul's Hospital dedicated in provision of day care service for elders. EDCC collaborates with various professional teams in the Hospital to deliver comprehensive nursing, rehabilitation and personal care. EDCC aims to maintain physical functioning, improve quality of life and to enable the continuity of living a prosperous life in the community for chronically ill elders or those with moderate to severe physical or cognitive impairment, or elder for wellness and to support the caregivers and the family by provision of day care centre service.



服務內容
Service Scope

護理服務
Nursing care

個人照顧
Personal care

復康治療
Rehabilitation therapy

認知訓練
Cognitive training

社交康樂活動
Social recreational activities

輔導
Counselling service

餐膳服務
Meal service

護老者支援
Elders' caregivers support

牧靈服務
Pastoral care service

交通接送
Transportation service



www.edcc.stpaul.org.hk

歡迎查詢

☎ : 2830 8802

頤康 天地

服務時間 Service Hours

星期一至六上午八時正至下午六時正
星期日及公眾假期休息

Monday to Saturday from 8am to 6pm
Closed on Sunday and public holidays

聖保祿醫院A座七樓

7/F, Block A, St. Paul's Hospital



Overview of the Three COVID-19 Vaccines Supplied to Hong Kong in 2021 (As of February 5th, 2021)

SPH Pharmacy Department

COVID-19 has afflicted tens of millions of people in a worldwide pandemic. Safe and effective vaccines are needed urgently. COVID-19 vaccines are mainly developed from four different technology platforms, including inactivated, viral vector, mRNA and protein subunit. The HKSAR Government has struck deals to procure 22.5 million doses of COVID-19 vaccines, with 7.5 million doses each coming from the three developers/manufacturers: Fosun Pharma-BioNTech (mRNA vaccine), AstraZeneca-Oxford (viral vector vaccine) and Sinovac Biotech (Hong Kong) Limited (inactivated virus vaccine) ^[1]. The first batch that could be made available is the 1 million doses of Fosun Pharma-BioNTech vaccine, which are expected to arrive Hong Kong from Germany in late February ^[2].

The territory-wide vaccination programme led by the Government will be launched as soon as possible after completing all necessary quality assurance procedures. Priority is accorded to high-risk groups including (1) residents and staff of residential care homes and other institutional facilities; (2) workers in healthcare settings and essential services, and persons aged 60 years or above; and (3) persons with chronic medical problems aged between 16 and 59 years ^[3]. Participation in the vaccination programme is on a voluntary basis and individuals are required to receive two doses of the same vaccine in order to build up adequate protection. The distribution of the vaccines would be subject to the Government's arrangement. To avoid confusion, the vaccination programme will not offer more than one type of vaccine in the same period and location. The members of the public can pick a different location where their preferred type of vaccine will be available if they prefer one over another type of vaccine.

The Government has gazetted the Prevention and Control of Disease (Use of Vaccines) Regulation (Cap. 599K), which provides the legal framework under the present state of public health emergency to bring in COVID-19 vaccines which satisfy the criteria of safety, efficacy, and quality for emergency use ^[4]. The Regulation provides healthcare professionals with civil immunity, such that they would not have to be civilly liable for any loss or damage attributable to the intrinsic property of the authorised vaccine. All applications for import licence of unregistered COVID-19 vaccine for treatment of particular patients would not be accepted for evaluation.

Fosun Pharma-BioNTech Vaccine (Brand Name: Comirnaty; INN: Tozinameran; BNT162b2)

General Vaccine Information

On December 11th, 2020, the U.S. Food and Drug Administration (FDA) issued the first emergency use authorisation (EUA) for Pfizer-BioNTech vaccine to prevent COVID-19 caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As part of the Fosun Pharma-BioNTech collaboration, the German drug manufacturer BioNTech, focuses on the development, manufacture and distribution of its proprietary mRNA-based vaccine while Fosun Pharma Industrial is responsible for the aspects of clinical trials, regulatory applications, sales and marketing in Mainland China, Hong Kong, Macau and Taiwan. The vaccines supplied to Hong Kong are manufactured in Europe ^[5].

Fosun Pharma-BioNTech Vaccine (i.e. Comirnaty) was authorised by the Secretary for Food and Health on January 25th, 2021 for emergency use in Hong Kong for active immunization to prevent COVID-19 in individuals 16 years of age and older. It is a lipid nanoparticle-formulated, nucleoside-modified mRNA vaccine that encodes a prefusion stabilized, membrane-anchored SARS-CoV-2 full length spike protein. The vaccine elicits both neutralising antibody and cellular immune responses to the spike antigen, which may contribute to protection against COVID-19 ^[6].

Safety and Efficacy Data

In a phase 2/3 multinational randomised placebo-controlled efficacy clinical trial with 43,548 participants over 16 years of age from 152 sites worldwide who were either healthy or had stable chronic medical conditions, a two-dose regimen of BNT162b2 was found to confer 95% (95% CI, 90.3-97.6) protection against COVID-19. Similar vaccine efficacy (90-100%) was observed across subgroups defined by age, sex, race, ethnicity, baseline body-mass index, and the presence of coexisting conditions ^[7].

The safety profile of BNT162b2 was characterized by short-term, mild-to-moderate injection site pain, fatigue, headache, myalgia and chills, arthralgia, and pyrexia. Systemic events were reported more often by younger vaccine recipients (16 to 55 years of age) than by older vaccine recipients (more than 55 years of age) and more often following the second dose. The incidence of serious adverse

events was low and similar in the vaccine and placebo groups (0.6% and 0.5%, respectively). Among the 21,720 people in the trial who received BNT162b2, four related serious adverse events were reported: shoulder injury related to vaccine administration, right axillary lymphadenopathy, paroxysmal ventricular arrhythmia, and right leg paraesthesia. Four participants in the clinical trial who received the vaccine later developed Bell's palsy [7]. However, a subsequent investigation by FDA found that the incidence of Bell's palsy was consistent with the expected background rate in the general population, and it could not be proven that the cases were caused by the vaccine [8].

Following the reports of 29 deaths in frail elderly patients out of 42,000 people who have received Pfizer-BioNTech vaccine in Norway [9], the World Health Organization (WHO) [10], European Medicines Agency (EMA) [11] and the Therapeutic Goods Administration (TGA) [12] reviewed the deaths reported and concluded that there was no specific safety concern, and no causal link between vaccination and deaths could be established. It was considered that the reports were in line with the expected, all-cause mortality rates and causes of death in the sub-population of frail, elderly individuals. There were no unexpected or untoward increase in mortality rate after frail, elderly individuals were vaccinated with Pfizer-BioNTech vaccine, and the administration of the vaccine was still considered to be beneficial for the elderly.

Triggered by the two reports of anaphylaxis following immunisation with the BNT162b2 in the UK, the Medicines and Healthcare products Regulatory Agency (MHRA) has issued guidance on the management of anaphylaxis in COVID-19 vaccination centres. The MHRA's updated advice include: (1) any person with a history of immediate-onset anaphylaxis to a vaccine, medicine or food should not receive the Pfizer-BioNTech vaccine; (2) a second dose of the Pfizer-BioNTech vaccine should not be given to those who have experienced anaphylaxis to the first dose of Pfizer-BioNTech vaccination; (3) vaccine recipients should be monitored for 15 minutes after vaccination; and (4) a protocol for the management of anaphylaxis and an anaphylaxis pack must always be available, and immediate treatment should include intramuscular adrenaline [13].

AstraZeneca-Oxford Vaccine (ChAdOx1 nCoV-19 or AZD1222)

General Vaccine Information

The University of Oxford partnered with AstraZeneca to develop and test a coronavirus vaccine known as ChAdOx1 nCoV-19 or AZD1222 which is a non-replicating viral vectored vaccine that utilizes a chimp adenovirus. On December 30th, 2020, the MHRA granted EUA of AstraZeneca's COVID-19 vaccine for active immunization of individuals 18 years or older for the prevention of COVID-19. In January 2021, Mexico and India also granted EUA of the vaccine.

AstraZeneca-Oxford vaccine is a monovalent vaccine composed of a single recombinant, replication-deficient chimpanzee adenovirus (ChAdOx1) vector encoding the Spike glycoprotein of SARS-CoV-2. Each 0.5mL dose contains 5×10^{10} viral particles of ChAdOx1-S recombinant. The Spike glycoprotein of SARS-CoV-2 is expressed locally stimulating neutralising antibody and cellular immune responses following administration [14].

Safety and Efficacy Data

The interim analysis of the efficacy and safety of the AstraZeneca-Oxford vaccine includes pooled data from four ongoing randomised, blinded, controlled trials done across three countries: COV001 in healthy adults 18 to 55 years of age (phase 1/2; UK), COV002 in adults ≥ 18 years of age including the elderly (phase 2/3; UK), COV003 in adults ≥ 18 years of age including the elderly (phase 3; Brazil), and COV005 in adults aged 18 to 65 years of age (phase 1/2; South Africa) [15].

Participants were randomised to receive either ChAdOx1 nCoV-19, the meningococcal conjugate vaccine MenACWY (COV001, COV002), MenACWY with the first placebo dose and saline for the second dose (COV003) or saline (COV005). Participants in the ChAdOx1 nCoV-19 group received two doses containing 5×10^{10} viral particles (standard dose; SD/SD cohort); a subset in the UK trial inadvertently received a half dose as their first dose due to a manufacturing error (low dose) and a standard dose as their second dose (LD/SD cohort). 23,848 participants were enrolled, and 11,636 participants were included in the interim primary efficacy analysis. In pooled analyses of the trials (11,636 participants), there were 131 symptomatic cases of COVID-19 in LD/SD or SD/SD recipients (30 cases in the vaccine arm vs. 101 cases in the control group), giving an overall vaccine efficacy of 70.4% across both groups (95.8% CI, 54.8-80.6). Vaccine efficacy was 62.1% (95% CI, 41.0-75.7) in the SD/SD cohort, whereas efficacy was higher at 90.0% (67.4-97.0; $p_{\text{interaction}} = 0.010$) in the LD/SD cohort.

175 serious adverse events occurred in 168 participants; 84 of these were in the ChAdOx1 nCoV-19 group, and 91 in the control group. Three events were classified as possibly related to either the experimental or a control vaccine: one in the ChAdOx1 nCoV-19 group (transverse myelitis occurring 14 days after the second vaccine dose), one in the control group (haemolytic anaemia), and one in a participant who remains masked to group allocation (fever higher than 40°C two days after receiving either the vaccine or placebo). The most frequently reported adverse reactions were injection site tenderness, injection site pain, headache, fatigue, myalgia, malaise, pyrexia, chills, arthralgia and nausea. The majority of these adverse reactions were mild to moderate in severity and



usually resolved within a few days of vaccination. Adverse reactions reported were generally milder and reported less frequently in older adults (≥ 65 years old) and after the second dose.

Sinovac Vaccine (CoronaVac)

General Vaccine Information

Developed by Sinovac Biotech, a Beijing-based pharmaceutical company, Sinovac vaccine is a chemically inactivated whole virus vaccine based on a strain of SARS-CoV-2 that was originally isolated from a patient in China.

Sinovac vaccine is authorised for active immunisation of individuals 18-59 years old who are susceptible to COVID-19. Each pre-filled syringe contains a single dose 3mcg/0.5mL (equivalent to 600SU per dose) of inactivated SARS-CoV-2 virus, and aluminium hydroxide as adjuvant ^[16]. Following administration, the vaccine induces SARS-CoV-2-specific neutralising antibodies, especially the more effective Spike-and receptor binding domain (RBD) antibodies. RBD-specific immunoglobulin accounts for part of the Spike-induced antibody responses ^[17-18].

Safety and Efficacy Data

Sinovac vaccine has been undergoing phase 3 clinical trials in Brazil, Indonesia and Turkey, interim data from late-stage trials in Turkey and Indonesia showed that the vaccine was 91.25% and 65.3% ^[19] effective respectively. A total of 7,371 volunteers were involved in the Turkish trial, but the efficacy data presented was based only on 1,322 participants (752 of whom got a real vaccine) ^[20], which is small compared with the Brazil trial of 13,000 people. The trial in Brazil was conducted on 13,000 healthcare professionals, considered at a higher risk of exposure to the virus ^[21].

In January 2021, researchers of the Butantan Institute in Sao Paulo announced that the Sinovac vaccine was 50.4% effective in preventing COVID-19, which was far below the 78% reported earlier. The scientists revealed that the figure only referred to those who had developed symptoms and required treatment. The efficacy rate was 50.4% if mild cases that did not require treatment were counted ^[19]. The efficacy rate just meets the 50% minimum threshold required for regulatory approval but is lower than the 70% recommended by the WHO. Sinovac and the Butantan Institute stressed that Sinovac vaccine was found to be 100% effective in preventing moderate to severe cases. This suggests that Sinovac vaccine is more effective in preventing cases that need treatment than in stopping those that do not require medication. Nevertheless, only with full details of the data can scientists and regulators assess the reliability of the studies and analyse its real efficacy.

Sinovac vaccine has proven its safety in a phase 1/2 trials on 743 volunteers that revealed no vaccine-related serious adverse events. Most adverse reactions were mild, with the most common symptom being injection site pain and the participants recovered within 48 hours ^[18].

Pharmacists' Point of View ^[3]

- All three COVID-19 vaccines consist of a schedule of two doses. They are not interchangeable with each other to complete the vaccination course as the safety and efficacy of a mixed-product series have not been evaluated.
- The most commonly reported side effects, which typically lasted several days, were pain at the injection site, fatigue, headache, muscle pain, arthralgia, chills, and fever. However, the occurrence of rare or unpredictable severe adverse events after widespread vaccination on the population cannot be completely ruled out.
- Limited data are currently available about COVID-19 vaccines on specific populations (e.g. pregnant women, lactating women, or children). COVID-19 vaccines are not routinely recommended during pregnancy or breastfeeding, unless the pregnant woman is considered at very high risk of SARS-CoV-2 exposure and subject to very high risk of COVID-19 complications or the lactating women have high clinical need for protection against COVID-19.
- Vaccination should be postponed in individuals suffering from acute severe febrile illness or acute infection. The presence of a minor infection and/or low-grade fever should not delay vaccination.
- In general, inactivated vaccines can be administered concurrently whereas an interval of 28 days is usually recommended for administration of live vaccines. There is currently no consensus on the interval of co-administration of mRNA vaccine or non-replicating adenoviral vector vaccine with other vaccines. As a precaution, administration of COVID-19 vaccine 14 days before or after another prophylactic vaccines would allow clearer ascertainment of potential adverse events.
- Safety and efficacy data from phase III clinical trials of the vaccines has not been fully established. There is a lack of evidence to suggest one vaccine is more superior than the others.

Overview of the Three COVID-19 Vaccines Supplied to Hong Kong in 2021




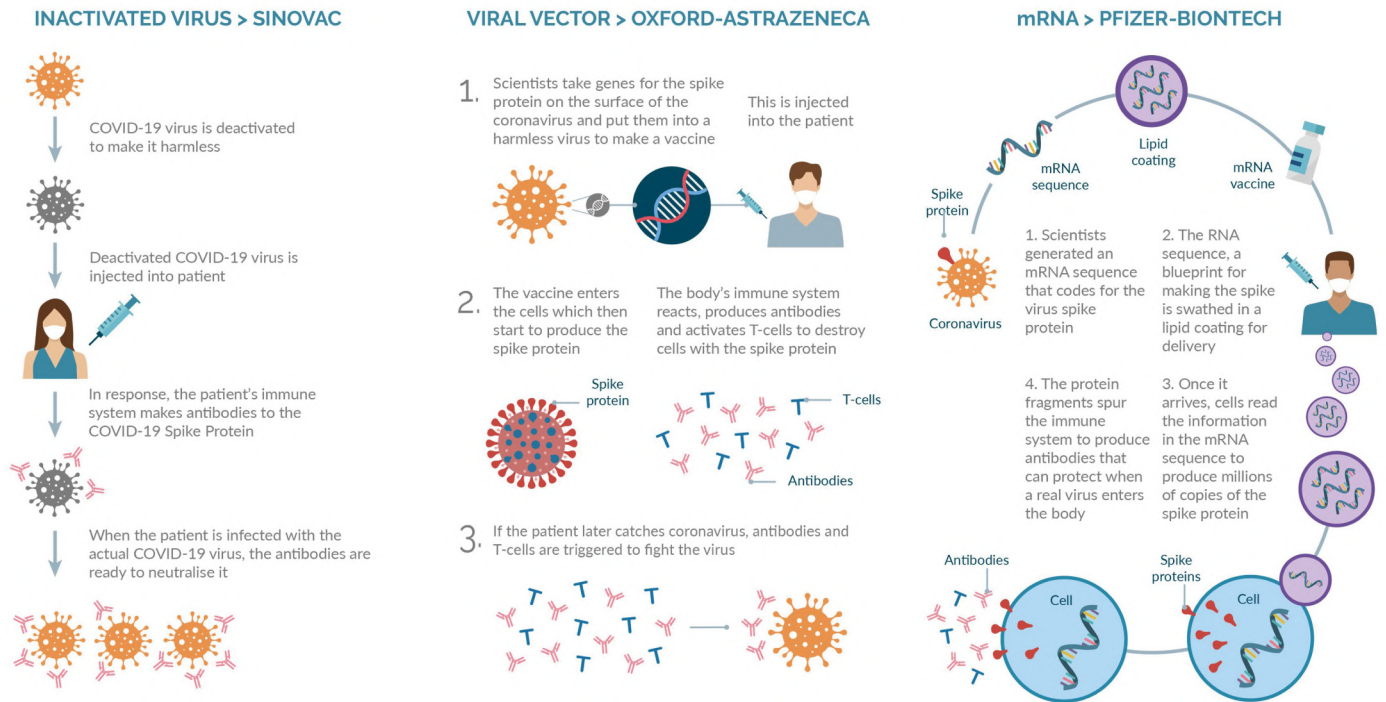
Vaccine supplier	Fosun Pharma-BioNTech		AstraZeneca-Oxford		Sinovac Biotech
					
Vaccine name	Comirnaty (Tozinameran or BNT162b2)		ChAdOx1 nCoV-19 (AZD1222)		CoronaVac
Vaccine type	mRNA		Non-replicating viral vector		Inactivated virus
Approval status	Approved in Switzerland, Saudi Arabia and Bahrain; Emergency use in US, EU, UK, Mexico, and other countries		Emergency use in UK, EU, Mexico, India and other countries		Emergency use in China, Indonesia, Turkey and Brazil
Published clinical trial reports	Phase 2/3 clinical trial preliminary report ^[7] (<i>The New England Journal of Medicine</i> ; Dec 10, 2020)		Phase 3 clinical trial interim analysis report ^[13] (<i>The Lancet</i> ; Dec 8, 2020)		Phase 1/2 clinical trial report ^[16] (<i>The Lancet</i> ; Nov 17, 2020)
Efficacy data	Preliminary results: 95%		Interim results: Overall: 70.4% LD/SD cohort: 90.0% SD/SD cohort: 62.1%		Interim results: Brazil trials: 50.4% Turkey trials: 91.25% Indonesia trials: 65.3%
Vaccine formulation	Multidose vial (0.45mL frozen dispersion) • Each vial provides 5 doses		Multidose vial (Solution for injection) • Each 4mL vial provides 8 doses • Each 5mL vial provides 10 doses		Pre-filled syringe (Milky suspension): • Each syringe provides 1 dose
Authorised age groups	≥16 years		≥18 years		18-59 years
Dosing and schedule	<ul style="list-style-type: none"> • 2 doses (0.3mL each) • At least 21 days apart 		<ul style="list-style-type: none"> • 2 doses (0.5mL each) • 4-12 weeks apart 		<ul style="list-style-type: none"> • 2 doses (0.5mL each) • 14 or 28 days apart^[3]
Route and site of administration	IMI (Deltoid muscle of the upper arm)		IMI (Deltoid muscle)		IMI (Deltoid muscle of the upper arm)
Handling instructions	Thawing <ul style="list-style-type: none"> • Thawed under 2°C to 8°C: may take 3 hours for a 195-vial pack • Thawed at room temperature (up to 30°C): 30 minutes 	Dilution <ul style="list-style-type: none"> • Add 1.8mL of 0.9% Sodium Chloride Solution for Injection into the vaccine vial, using a 21-gauge or narrower needle • Do not shake 	<ul style="list-style-type: none"> • Do not shake • Dilution and thawing are not required 		<ul style="list-style-type: none"> • Shake well before use • Dilution and thawing are not required
Adverse drug reaction	Injection site pain (>80%); fatigue (> 60%); headache (> 50%); myalgia and chills (> 30%); arthralgia (> 20%); pyrexia and injection site swelling (> 10%)		Injection site tenderness (>60%); injection site pain, headache, fatigue (>50%); myalgia, malaise (>40%); pyrexia, chills (>30%); arthralgia, nausea (>20%)		Injection site reactions (22.2%); fatigue (4.2%); diarrhoea (4.2%); fever (2.8%), muscle pain (2.1%); nausea (1.4%), headache (1.4%) ^[22]
Use in Specific population	Pregnancy	Only be considered when the potential benefits outweigh any potential risks for the mother and foetus			No information available
	Lactation	Unknown whether the vaccine is excreted in human milk			
	Paediatric	The safety and efficacy in those younger than 16 years of age have not yet been established	The safety and efficacy in those younger than 18 years of age have not yet been established		
Shelf life	Unopened vial: <ul style="list-style-type: none"> • -90°C to -60°C: 6 months • 2°C to 8°C: up to 5 days • Up to 30°C: up to 2 hours 		Unopened vial: 2°C to 8°C: 6 months		To be confirmed
Storage	Vials after dilution: <ul style="list-style-type: none"> • Store at 2°C to 30°C: use within 6 hours • Do not refreeze • Minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light 		Unopened vial: <ul style="list-style-type: none"> • Store at 2°C to 8°C • Do not freeze • Protect from light 	After first use: <ul style="list-style-type: none"> • Store at 2°C to 25°C: Use within 6 hours 	<ul style="list-style-type: none"> • Store at 2°C to 8°C • Do not freeze • Protect from light



Figure 1. Mechanism of Action of the Three COVID-19 Vaccines



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NEW DRUG APPROVAL

Following the Drug and Therapeutics Committee meeting in July and December 2020, the following drugs have been approved and added to the SPH formulary:

Drug	Indication(s)	Usual dosage	Remarks
Xarelto (rivaroxaban) tablet 2.5mg	<ul style="list-style-type: none"> For the prevention of atherothrombotic events in adults with coronary artery disease or symptomatic peripheral artery disease at high risk of ischaemic events, co-administered with aspirin 		NA
Stelara (ustekinumab) concentrate for solution for infusion 130mg/26mL Stelara (ustekinumab) injection in pre-filled syringe 45mg/0.5mL and 90mg/mL	<ul style="list-style-type: none"> Moderately to severely active Crohn's disease in adults who had inadequate response with, lost response to or were intolerant to either conventional therapy or a tumour necrosis factor-α (TNFα) antagonist or have medical contraindications to such therapies 	<ul style="list-style-type: none"> IV induction at 6mg/kg then maintenance dose of 90mg every 8 weeks by subcutaneous injection 	On request only (Please contact Pharmacy Department if you would like to prescribe Stelara)
Bridion (sugammadex) injection 200mg/2mL	<ul style="list-style-type: none"> Reversal of rocuronium- or vecuronium-induced neuromuscular blockade in adults undergoing surgery 	<ul style="list-style-type: none"> Rapid IV bolus injection (within 10 seconds): <ul style="list-style-type: none"> Reversal of rocuronium- or vecuronium-induced moderate blockade: <i>2mg/kg</i> Reversal of rocuronium- or vecuronium-induced deep blockade: <i>4mg/kg</i> Immediate reversal of rocuronium-induced blockade: <i>16mg/kg</i> 	NA
Lokelma (sodium zirconium cyclosilicate) oral powder 5g & 10g	<ul style="list-style-type: none"> Treatment of hyperkalaemia in adult 	<ul style="list-style-type: none"> Correction phase: 10g three times daily Maintenance phase: start at 5g daily, then titrate up or down from 5g alternate day to 10g daily 	<ul style="list-style-type: none"> NOT for emergency treatment of life-threatening hyperkalaemia as Lokelma starts to reduce serum potassium one hour after administration Consider other treatment approaches if normokalaemia not achieved after 72 hours Mix sachet of powder with 45mL water. Take with or without food
Monovisc (sodium hyaluronate) pre-filled syringe 88mg/4mL	<ul style="list-style-type: none"> Treatment of pain in osteoarthritis of the knee 	<ul style="list-style-type: none"> Single, intra-articular injection of 88mg (4mL) 	<ul style="list-style-type: none"> Can repeat injection in 6 months



CME
ANNOUNCEMENT

CME/CPD/CNE Programme 2021

Update of Lipid Management – PCSK9 inhibitor and ESC lipid guideline update

Speaker: Dr. Chan Ki Wan, Kelvin
Specialist in Cardiology

Chairman: Dr. Cheung Chi Yeung
Staff Consultant in Cardiology, St. Paul's Hospital

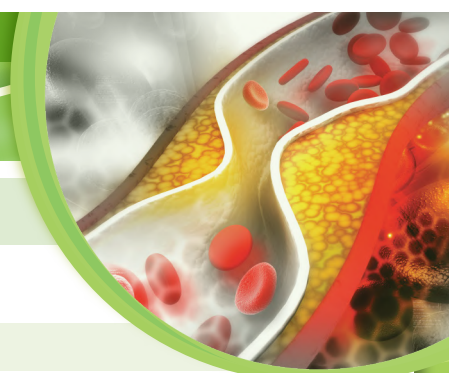
Date: 18 March 2021 (Thursday)

Time: 7:00 pm – 7:30 pm Reception (light refreshment provided)
7:30 pm – 8:30 pm “Update of Lipid Management –PCSK9 inhibitor and ESC lipid guideline update” by Dr. Chan Ki Wan, Kelvin
8:30 pm – 9:00 pm Q&A session

Venue: Auditorium, 18/F, Block A, St. Paul's Hospital

Registration & Enquiry: Contact Person: Ms. Merrillin Leung
(First-come-first-serve) Tel: 2830 8857, Fax: 2837 5271, E-mail: sph.sdd@mail.stpaul.org.hk

CME / CPD / CNE Accreditation for all Colleges (Pending approval)





長期服務獎頒發儀式 及聖誕慶祝活動



為表揚和感謝員工多年來的貢獻及努力，聖保祿醫院於12月15日假本院演講廳舉行2020年長期服務獎頒發儀式。今年共九位同事獲得三十年長期服務獎及四位同事獲得二十年長期服務獎，而獲得十年長期服務獎的同事有六十四位之多。當天院方致送紀念水晶及獎狀給長期服務獎者表達謝意。今年亦特設長青服務獎，以茲鼓勵一眾年屆退休的同事，獲獎的同事有十位。他們敬業樂業，熱心於醫院工作，在醫院提供無與倫比的服務水準。在儀式的尾聲亦抽出了今年幸運抽獎的幸運兒，場面高興熱鬧。



因應疫情，每年一度之聚餐改為提供聖誕午餐盒或晚餐盒於12月16日當值之同事。當天院方亦送出了幸運抽獎的獎品給予得獎者，讓大家在繁忙的工作中仍能感受節日的氣氛。



今年特別增添抗疫口罩獎品