

# Pre-vaccination Screening Service



The Government of HKSAR has announced a territory-wide COVID-19 Vaccination Programme for all Hong Kong residents. This is a welcome development in the fight against the Covid-19 pandemic.

To date, most of the side effects of the vaccines have been relatively mild and short-lived (e.g. fever, headache, fatigue, muscle and joint pains). However there have been some patients so far who have experienced anaphylaxis, which is a severe allergic reaction, after receiving the messenger RNA (mRNA) vaccines. Over 70% developed the reactions within 15 minutes of injection.

Anaphylactic reactions caused by anti Covid-19 vaccines are rare, in the order of 10 per 1 million doses given. The cause of the severe allergy following COVID-19 vaccination is unknown and there is no precedent as these mRNA vaccines are new. Historically, reactions to other vaccines are seldom caused by the active ingredients. Instead, inactive ingredients, such as the excipients polyethylene glycol (PEG) and polysorbates added to improve solubility, are the commonest causes of reactions. Over recent years, excipients have been recognised as hidden allergens that may be causing repeated reactions in patients with hitherto undiagnosed severe allergic reactions to multiple classes of drugs.

Health authorities worldwide acknowledge that the risk of severe illness and death from COVID-19 outweighs the risk of developing anaphylaxis after vaccination. Nonetheless some individuals having a past history of allergies are sufficiently fearful of developing severe reactions that they refuse vaccination.

The Allergy Centre at HKSH is therefore pleased to announce that it has established a service to help pre-screen individuals who may be at risk of developing an allergic reaction to COVID-19 vaccines, including detailed testing of the excipients, PEG and polysorbates. This involves completion of a screening questionnaire and if the person is deemed to be at risk, further skin tests will be performed using drugs unrelated to the vaccines, but containing PEG and polysorbates, to assess the presence of possible allergy to the excipients.

## 疫苗注射前檢查服務



政府已公佈會推行一個全港性新冠疫苗接種計劃，為所有香港居民接種2019冠狀病毒疫苗，這是有效控疫的重要一步。

至今，因注射2019冠狀病毒疫苗而引致的副作用相對輕微和短暫，如發燒、頭痛、倦怠、肌肉及關節痛等。但有報告指部份病人接種mRNA疫苗後曾出現過敏性休克，屬一種嚴重過敏反應，而其中逾70%人士的過敏反應於注射後15分鐘內出現。

2019冠狀病毒疫苗引致過敏性休克的機會尚算罕見，注射每一百萬劑中約有10宗個案。2019冠狀病毒疫苗導致嚴重過敏反應的成因未明，因為mRNA疫苗是一種新模式的疫苗。但按以往經驗推算，大部份過敏反應並非由疫苗的活性成分所致，而是由疫苗中如聚乙二醇(PEG)或聚山梨醇酯(Polysorbate)等的輔料引起，相關輔料有助增加疫苗的可溶性。過往有不少人對不同種類的藥物重覆出現嚴重過敏反應，但一直未能找出原因。直至近年才發現輔料有機會是元兇。

全球衛生專家均認為，感染2019冠狀病毒引致的嚴重疾病及死亡風險，遠高於接種疫苗後出現過敏性休克的風險，但個別有過敏病史的病人有可能因感憂慮而拒絕接種疫苗。

養和過敏病科中心推出「疫苗注射前檢查服務」，為有藥物或疫苗過敏病史的人士進行檢查，以評估對2019冠狀病毒疫苗的過敏風險。接受「疫苗注射前檢查服務」的人士，會先透過問卷了解有關的藥物或疫苗過敏病史。有過敏風險的病人會接受進一步檢測，包括皮膚點刺測試及/或在皮內注射含有聚乙二醇(PEG)或聚山梨醇酯(Polysorbate)等輔料的物質，以測試對相關輔料有否過敏反應。