



**KENYATAAN MEDIA
KEMENTERIAN KESIHATAN MALAYSIA**

**HASIL DAPATAN KAJIAN KEBERKESANAN RAWATAN
VERMECTIN UNTUK PESAKIT COVID-19 BERISIKO TINGGI
(I-TECH STUDY)**

Institut Penyelidikan Klinikal (ICR), NIH hari ini mengumumkan hasil dapatan kajian Ivermectin (I-TECH) ke atas 500 pesakit COVID-19 yang dimasukkan ke hospital dengan kategori 2 atau 3 COVID-19. Kajian klinikal *open-label randomised trial* tersebut menilai keberkesanan rawatan 5 hari *ivermectin* (0.4mg/kg/hari) berserta penjagaan standard (kumpulan *IVM*), berbanding dengan hanya penjagaan standard (kumpulan *standard of care - SOC*) yang berdasarkan garis panduan Kementerian Kesihatan Malaysia (KKM) untuk pesakit COVID-19 di 20 hospital kerajaan dan Pusat Kuarantin dan Rawatan COVID-19 MAEPS 2.0.

Kajian percubaan klinikal tersebut telah dijalankan oleh pakar perubatan penyakit berjangkit dan pakar perubatan yang terlibat secara aktif dalam pengurusan COVID-19 dengan kerjasama Institut Penyelidikan Klinikal (ICR), di bawah Institut Kesihatan Negara (NIH). Hasil utama kajian I-TECH adalah untuk melihat sama ada pemberian ubat *ivermectin* pada minggu pertama pesakit mengalami gejala penyakit COVID-19 berupaya untuk mencegah kemerosotan penyakit COVID-19 kepada tahap yang teruk (kategori 4 atau 5), iaitu di kalangan pesakit berumur 50 tahun dan ke atas, serta mempunyai sekurang-kurangnya satu komorbiditi.

Dr. Kalaiarasu M. Peariasamy, Pengarah ICR memaklumkan bahawa kajian I-TECH telah menunjukkan kadar kemerosotan penyakit COVID-19 kepada tahap teruk adalah sama di dalam kumpulan *IVM* jika dibandingkan dengan kumpulan *SOC*, iaitu masing-masing pada 21.2 peratus dan 17.3 peratus (OR 1.29 [95%] CI 0.82-2.02]; $p=0.30$). Bagi dapatan yang sama, purata tempoh kemerosotan adalah 3.0 hari bagi kumpulan *IVM* dibandingkan dengan 2.9 hari untuk kumpulan *SOC*, namun tiada perbezaan yang signifikan dari segi statistik; $p=0.68$.

Kajian yang telah dijalankan oleh KKM ini mendapat kelulusan Jawantankuasa Etika dan Penyelidikan Perubatan pada 25 Mei 2021. Kajian tersebut juga telah didaftarkan di *ClinicalTrials.gov* pada 31 Mei 2021 (NCT04920942) bagi mendedahkan maklumat penting berkenaan kajian I-TECH kepada umum. Daripada 500 subjek yang didaftarkan dalam kajian ini, seramai empat (4) individu telah dikecualikan kerana tidak memenuhi kriteria kajian, manakala seramai enam (6) individu telah menarik diri atas sebab kebimbangan terhadap kesan sampingan *ivermectin*. Subjek terakhir direkrut pada 9 Oktober 2021 dan penilaian susulan terakhir adalah pada 25 Oktober 2021.

Menurut penyelidik utama kajian I-TECH, Dr. Steven Lim Chee Loon, Pakar Perubatan Penyakit Berjangkit di Hospital Raja Permaisuri Bainun, Ipoh, tiada perbezaan ketara didapati dari segi kemasukan ke ICU, penggunaan alat bantuan pernafasan mekanikal, pemulihan simptom, parameter ujian darah dan resolusi imbasan X-Ray dada di antara kedua-dua kumpulan tersebut. Kebarangkalian untuk pulih dari gejala sepenuhnya pada hari ke-5 penyertaan di antara kumpulan *IVM* dengan *SOC* adalah hampir sama, di mana tiada perbezaan yang signifikan dari segi statistik ($p=0.77$).

Selain daripada itu, analisis keselamatan melaporkan bahawa kejadian kesan sampingan adalah tiga (3) kali lebih kerap berlaku di dalam kumpulan *IVM* berbanding kumpulan *SOC*; di mana kebanyakannya adalah kes cirit birit. Sementara itu, terdapat trend pengurangan mortaliti dalam tempoh 28 hari bagi kumpulan *IVM* berbanding dengan penjagaan standard, namun trend pengurangan ini tidak mencapai keputusan statistik yang signifikan (OR 0.30 [95% CI 0.08-1.11]; p=0.09). Menurut Profesor Dr. Lai Nai Ming dan Profesor Madya Dr. Karuthan Chinna dari *Taylor's School of Medicine* yang bertanggungjawab menyediakan analisis statistik secara bebas, kajian I-TECH tidak dapat mengesahkan dapatan bahawa penggunaan *ivermectin* di hospital-dapat mengurangkan kematian dalam tempoh 28 hari, berbanding dengan penjagaan standard sahaja. Ini kerana jumlah kematian adalah amat kecil (13/490) dan ini seterusnya menyebabkan penilaian yang terhad ke atas hasil dapatan tersebut.

Berdasarkan hasil kajian I-TECH, *ivermectin* tidak disyorkan untuk dimasukkan ke dalam garis panduan rawatan COVID-19 sedia ada kerana *ivermectin* tidak mengurangkan risiko penyakit COVID-19 tahap teruk. KKM menyarankan agar *ivermectin* hanya digunakan dalam kajian klinikal dengan pemantauan. Keputusan *I-TECH* juga selari dengan kajian berskala besar seperti *IVERCOR-COVID19* dari Argentina dan *TOGETHER* dari Brasil yang tidak menyokong penggunaan rutin *ivermectin* dalam amalan klinikal rawatan COVID-19. Pasukan kajian I-TECH bercadang menghantar data kajian tersebut untuk diterbitkan di dalam jurnal *peer-reviewed* bagi memberi maklumat tambahan kepada kajian-kajian *ivermectin* termasuklah *meta-analysis*.

Diharapkan dapatan kajian tempatan ini dapat memberi pencerahan kepada Pengamal Perubatan di Malaysia dan juga kepada orang ramai yang sering bertanya mengenai keberkesanan *ivermectin* dalam amalan klinikal rawatan COVID-19. Pengamal Perubatan diingatkan untuk tidak mengesyorkan penggunaan *ivermectin* termasuklah berkongsi pengiklanan mahupun penjualan secara haram *ivermectin* dengan tujuan merawat COVID-19 sehingga bukti saintifik yang lebih kukuh tersedia.

Sekian, terima kasih.

TAN SRI DATO' SERI DR. NOOR HISHAM ABDULLAH
KETUA PENGARAH KESIHATAN MALAYSIA

3 November 2021



**MEDIA STATEMENT
MINISTRY OF HEALTH MALAYSIA**

**IVERMECTIN TREATMENT EFFICACY IN COVID-19 HIGH RISK
PATIENT (I-TECH STUDY)**

The Institute for Clinical Research (ICR) NIH today announced findings for the Ivermectin study (I-TECH) in 500 hospitalised patients with Stage 2 or 3 COVID-19. This multi-centre open-label randomised controlled trial evaluated a 5-day course of ivermectin (0.4mg/kg/day) plus standard of care (IVM group), compared to standard of care (SOC group) according to Ministry of Health Malaysia (MOH) guidelines for COVID-19 patients at 20 government hospitals and MAEPS 2.0 Quarantine and COVID-19 Treatment Centre (PKRC).

The trial was conducted by infectious disease physicians and clinicians who were actively involved in COVID-19 management in collaboration with the Institute for Clinical Research (ICR), National Institute of Health (NIH). The main outcome of the I-TECH study was to see if ivermectin administered during the first week of illness prevented deterioration to severe COVID-19 Stage 4 or 5 among hospitalised patients aged 50 years and above with at least one comorbidity.

ICR Director, Dr Kalaiarasu M. Peariasamy, said the I-TECH findings showed that patients in the IVM group compared to SOC group had similar rates of progression to severe COVID-19 disease at 21.2 percent and 17.3 percent respectively (OR 1.29 [95% CI 0.82-2.02]; $p = 0.30$). For the same

primary outcome, the mean time to progression was 3.0 days for the IVM group compared to 2.9 days for the SOC group, but the difference was not statistically significant; $p=0.68$.

This MOH initiated study obtained Medical Research and Ethics Committee (MREC) approval on 25th May 2021. In order to disclose to the public key information about the I-TECH study, the trial was registered in ClinicalTrials.gov on 31st May 2021 (NCT04920942). From the sample of 500 subjects enrolled in the trial, four (4) were excluded for not meeting study criteria and six (6) withdrew after expressing concerns about ivermectin side effects. The last subject was recruited on 9th October and the follow-up ended on 25th October 2021.

According to the Principal Investigator of the I-TECH study, Dr. Steven Lim Chee Loon, Infectious Disease Specialist at Hospital Raja Permaisuri Bainun, Ipoh, there were no significant differences found in terms of ICU admission, mechanical ventilation, symptom recovery, blood parameters and chest x-ray resolution in both groups. The odds of complete symptom recovery by Day 5 of enrolment between IVM and SOC groups were very similar and not statistically significant; $p=0.77$.

Additionally, safety analysis showed three times more adverse events were reported in the IVM group versus the SOC group; most commonly diarrhoea. Meanwhile, there was a trend of 28-day mortality reduction by IVM with standard of care, but not reaching statistical significance (OR 0.30 [95% CI 0.08-1.11]; $p=0.09$). According to Professor Lai Nai Ming and A/Professor Karuthan Chinna from Taylor's School of Medicine who provided independent statistical analysis, the I-TECH study cannot confirm whether ivermectin administered in hospital compared with

standard of care alone leads to fewer deaths at 28 days. This is due to the small number of deaths (13/490) which provided limited evaluation of the result.

Based on the outcomes of the I-TECH study, ivermectin cannot be recommended for inclusion in current COVID-19 treatment guidelines as ivermectin does not reduce risk of severe illness from COVID-19. The MOH continues with prior advice that ivermectin only be used within clinical trials settings with monitoring. This is also supported by other recent large studies such as IVERCOR-COVID19 from Argentina and TOGETHER from Brazil which do not support the routine usage of ivermectin in clinical practice. The I-TECH study team plans to submit the data for publication in a peer-reviewed journal which can help provide additional research information for ivermectin studies including meta-analysis.

It is hoped that the findings of this local study can help to inform Medical Practitioners in Malaysia and also to the public, who often ask about the effectiveness of ivermectin in the clinical practice of COVID-19 treatment. Until further supportive evidence becomes available, practitioners are cautioned not to recommend ivermectin including sharing illegal advertising or sale of ivermectin for treatment of COVID-19.

Thank you.

TAN SRI DATO' SERI DR. NOOR HISHAM ABDULLAH
DIRECTOR- GENERAL OF HEALTH MALAYSIA

3 November 2021

KEBERKESANAN RAWATAN IVERMECTIN PADA PESAKIT BERISIKO TINGGI COVID-19 (KAJIAN I-TECH)



Adakah Ivermectin boleh mencegah penyakit COVID-19 daripada menjadi lebih serius?

Kajian Klinikal

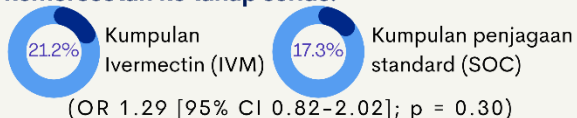
- 500** pesakit (50 tahun ke atas dengan komorbid)
- Gejala ringan-sederhana COVID-19 pada minggu pertama permulaan simptom
 - Dibahagikan secara rawak kepada penjagaan standard Ivermectin dan penjagaan standard Ivermectin

Keselamatan & kesan advers

- 3x** lebih kesan advers dengan ivermectin.
- Kesan advers yang paling kerap adalah cirit-birit.
-

Keberkesanan Rawatan

- Data tidak menunjukkan perbezaan dalam kadar kemerosotan ke tahap serius.



- Data tidak menunjukkan perbezaan masa kemerosotan ke tahap serius.



- Pemulihan gejala pada hari ke-5 penyertaan adalah serupa untuk kedua-dua kumpulan.

Kesimpulan

- Ivermectin **tidak mencegah** penyakit COVID-19 daripada menjadi lebih serius.
- Ivermectin **tidak disarankan** untuk dimasukkan ke dalam garis panduan rawatan COVID-19 sedia ada.

Rujukan: Institut Penyelidikan Klinikal (ICR) NIH, KKM. (2021). Kajian I-TECH, NMRR-21-155-58433; ClinicalTrials.gov: NCT04920942.

IVERMECTIN TREATMENT EFFICACY IN COVID-19 HIGH RISK PATIENT (I-TECH STUDY)



Does ivermectin reduce your risk of severe illness from COVID-19?

Clinical trial

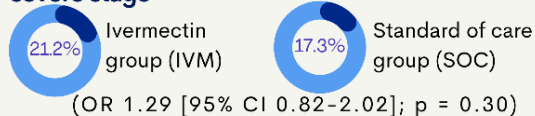
- 500** patients (50 years & above with comorbidity)
- Mild-moderate COVID-19 illness within first week after symptoms onset
 - Randomly assigned to Ivermectin or standard of care group

Safety and adverse events

- 3x** more adverse events with Ivermectin.
- Most common adverse effect is diarrhoea.
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Treatment Efficacy

- Data showed no difference in rate of progression to severe stage



- Data showed no difference in time of progression to severe stage



- Symptom recovery by day 5 of enrolment were similar for both groups

Conclusion

- Ivermectin **does not** reduce risk of severe illness from COVID-19
- Ivermectin is **not recommended** for inclusion in current MOH COVID-19 treatment guidelines

Source: Institute for Clinical Research (ICR) NIH, MOH Malaysia. (2021). I-TECH study, NMRR-21-155-58433; ClinicalTrials.gov: NCT04920942.