We are fighting an unprecedented pandemic. A novel coronavirus (SARS-CoV-2) emerged in 2019; its associated severe pneumonia (COVID-19) that was initially reported from Wuhan, China, has stunned the world. Outbreaks of COVID-19 raged across many countries in Asia, then Europe, North America, and worldwide. It is heart-breaking to hear about the overwhelmed healthcare system in many countries. On March 11, 2020, the World Health Organization declared COVID-19 to be a pandemic. Dramatic disruption of life has taken hold in an attempt to contain or mitigate the impact of COVID-19, with restrictions on travel and population movement that have engulfed the globe.

In past months, many ISTM members have been advising travelers facing the “GO or NO GO” decision, many have been diagnosing and managing COVID-19 cases at their institutions, and many are battling explosive outbreaks. Some ISTM members have already been infected and others are quarantined. On behalf of the Executive Board, I want to express our sincere concern and support for our dedicated colleagues. ISTM is working on a short artistic tribute to health care workers, including many ISTM members, contributing to fighting the crisis.

The COVID-19 Pandemic has expedited innovation. As the pandemic evolved, many conferences, meetings, and gatherings had to be cancelled or postponed and new plans needed to be made with flexibility in mind. The CISTM17 Scientific Program Committee Chairs developed an exciting program in February for the 2021 conference, but the Executive Board continued to review the format and content. COVID-19 also gave an impetus to jumpstart a virtual version of the ISTM North American Travel Medicine Review and Update Course, scheduled for August 14-15, 2020. There are many other ISTM resources on COVID-19:

- The Professional Education Committee, led by Chair Sarah Kohl (USA), has partnered with the company SelfStudy, using computer technology in developing an online course. This is being offered through the ISTM website.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- The Webinars Team, led by Yen Bui (Canada), organized a superb virtual symposium on March 11, with presentations by leaders on the frontline.
- Finally, Jodi Metzgar (formerly ISTM Deputy Director) has assumed the role of ISTM Acting Executive Director. Jodi joined ISTM Secretariat in 2015 and brings 17 years of experience working with non-profits and membership-based organizations. We are excited that Jodi has accepted to serve in this capacity as we transition to make a substantive appointment for Executive Director. A search committee has been formed.

The COVID-19 Pandemic will test the resilience of the travel medicine community. If possible - please enroll patients in clinical trials in order to improve the understanding about the disease and management. We can continue to learn from and support one-another during this historic challenge. We are all in this together. Stay healthy.

Lin Chen,
ISTM President
Welcome to the Spring edition of Travel Medicine News. The world we live in has changed enormously in the last months, putting travel medicine and infectious diseases very firmly on the world’s radar. Borders were closed and travel suspended, leading to lockdown in many countries. Unfortunately, travel medicine conferences also became casualties of the strict measures introduced. Our thanks and best wishes to all of you involved in caring for those affected by COVID-19 or working in areas of research and development in the race to find a vaccine. We are all too aware of the risk to frontline workers during this pandemic as many mourn the sad loss of colleagues and associated healthcare professionals who are involved in treating patients and saving lives.

Resources have arrived quickly. In addition to articles on COVID-19 published in JTM, Oxford University Press continues to publish a collection of articles on COVID-19, other coronaviruses, and related topics. https://academic.oup.com/journals/pages/coronavirus?cc=gb&lang=en-

If you weren’t able to listen to the ISTM Digital Symposium on March 11 where you can hear experts with experience on the COVID-19 outbreak I would recommend it to you. Find it with ISTM Member Benefit Programs on the MyISTM website. On April 1, 2020 ISTM held a second COVID-19 Digital Symposium on COVID-19 in Europe, the new Epicenter.

As a reminder, the TravelMed forum also allows ISTM members to communicate on clinical travel medicine discussions. Naturally, COVID-19 is generating the majority of discussions currently, but the forum still continues to be an active source of extremely useful discussions on a variety of other topics. As COVID-19 measures can vary between countries, it’s important to be mindful of information posted.

Here are some tips for efficiently using the forum:

1. Be as explicit as possible with the Subject of your post. A subject of “19” is generating the majority of discussions currently, but the forum still continues to be an active source of extremely useful discussions on a variety of other topics. As COVID-19 measures can vary between countries, it’s important to be mindful of information posted.

2. Search on previous posts to see if there is an answer to your question before you post a new question.

3. Do not post a question/response under a pre-existing subject that has nothing to do with your question! Create a new post, or find an existing thread with the same question.

4. During this busy time, consider using the private message function to reply to an author when appropriate. An example would be to thank someone or say that you agree with their comment – it is not necessary to post this type of message to everyone.

Above all, keep the posts coming: it’s a valuable service and excellent tool to share ideas, foster collegiality, and discuss problems. If you are in doubt about a post, please contact us at ISTM! (ISTM@ISTM.org). Many of you check with us before posting, and we are happy to review a potential post if you have any concerns or questions.

Please visit the TravelMed page on the ISTM website to review the rules and etiquette of using the forum: www.ISTM.org/travelmedlistserv.

The ISTM has also seen changes within. Hopefully you enjoyed the special edition of Travel Medicine News, “Diane Nickolson: A Decade of Excellence.” Diane retired from her role as ISTM Executive Director in March after a decade of exemplary service as reflected by member comments. Until a new Executive Director is appointed, Jodi Metzgar has taken over as Acting Executive Director. Jodi’s experience has been outlined in Lin Chen’s Presidential Letter welcome.

Sandra Grieve, ISTM Travel Medicine News Editor-in-Chief
Nancy Pietroski, Travel Medicine News Associate Editor
Lin Chen, ISTM President
Gerard Flaherty, ISTM Publications Committee Chair
Jodi Metzgar, ISTM Acting Executive Director
Whitney Alexander, ISTM Marketing Coordinator
Dawn Keough, ISTM Designer

The International Society of Travel Medicine
E-mail: ISTM@ISTM.org | Skypename: istm.office
Phone: +1.404.373.8282 | Fax: +1.404.373.8283
Office hours: Monday - Friday, 9.00 - 17.00 EDT (UTC-04)
Mail and Courier: 1200 Ashwood Parkway, Suite 500; Dunwoody, GA 30338 United States of America
A Roller-Coaster Quarter

As I write for TMN on the way back to UK from New Zealand, I reflect on a world which has changed radically over the last few weeks and months. With total numbers of identified infections now well in excess of 2.5 million, over 180,000 have died, including Dr Li Wen Liang who first drew the world’s attention to COVID-19 in December, was arrested, and then contracted Covid 19, dying on February 17. A deeply moving final statement from him was widely circulated on social media.

When I left Edinburgh for New Zealand on 5th March there were only 5 identified COVID-19 infections in Scotland. I travelled to attend the Asia Pacific Travel Health Conference, to help Pierre Landry and Michelle Clarke with the CTH examination, and Michelle with the ISTM booth at the conference. Two days after we arrived in NZ the conference was cancelled because so many speakers were unable to come, but a few days later the NZ Prime Minister, Jacinda Ardern announced a 14-day quarantine period for anyone entering the country, rendering attendance at APTHC impossible.

As I return to Scotland case numbers there have risen to well over 300, and we will self-isolate for two weeks, although our exposure potential in NZ has been very low.

COVID-19 has had the following effects on ISTM activities most of which have been associated with significant financial loss following cancellation of flights and accommodation:

1. The Scientific Program Committee in Kuala Lumpur was transferred to Lisbon
2. The CTH Examination in Auckland was cancelled
3. The North American Travel Medicine Update and Review Course was deferred
4. SADI/SLAMVI/ISTM cancelled the RCISTM in Buenos Aries. After this meeting the Executive Board were due to meet face-to-face.
5. The CTH Examination in Buenos Aries has been deferred to November.
6. A visit that Lin Chen and I had scheduled to Atlanta for early April to coincide with the GeoSentinel Quarterly meeting was cancelled. Losses for this were minimised by exchanging booked flights for future travel vouchers, and booking accommodation with a cancellation clause.

COVID-19 has exposed areas of ISTM policy weaknesses. Most travel on ISTM business has previously occurred without travel insurance. This must now change. Most flights have been undertaken with cheaper non-flexible tickets and in the future we need to ensure that the savings by sacrificing flexibility are not exceeded by outright losses on non-refundable flights. Accommodation needs to be booked on terms that allow cancellation without financial loss.

We are also introducing standardized rates for COVID-19 subsistence expenses when travelling on ISTM business. This is a separate issue from Covid 19 but we need to contain costs for meals and refreshments, for which claims have sometimes been excessive when judged by well accepted international and US standards.

I add my congratulations to Lin’s to Jodi Metzgar who is now Acting ED following Di Nickolson’s resignation in late December. Di’s resignation allows us to re-examine the relationship between the Secretariat and Executive Board which will change, so adjustments to the next ED contract and the Employee Handbook will follow over the next few months.

I pay particular tribute to the resilient Secretariat staff. The last few months have been disturbing and unsettling and they have responded with maturity and generosity in a time of change. One change which we would prefer to have avoided is relocating the office, but our lease expires at the end of July. A decision will be announced when appropriate.

This is a virus tragically now owned by the community of nations and is not the responsibility of one country, whatever some politicians may imply. So lastly, we have in mind the courageous way that many ISTM members across the world have become involved in the COVID-19 outbreak. I have been heartened by photographs of those on the frontline of response on the ISTM forum. This is self-evidently a dangerous virus carrying a significant mortality. Many of us will become infected and some will not survive. The term ‘thoughts and prayers’ is often trotted out in circumstances that are difficult but here I believe it reflects our inner orientation as ISTM leaders and members across the world. We adhere to different belief systems but share a common humanity and concern for each other. I am confident we will emerge from this a more caring and wiser healthcare community.

Mike Jones,
Secretary-Treasurer
Celebrating Fellow Healthcare First Responders in Our Community and Beyond

Thank you to all who submitted a video portrait to this project; the response has been incredible. This project was done in an effort to recognize healthcare professionals and first responders for your dedication, bravery, empathy and compassion during this extraordinary time.

Kuala Lumpur, Malaysia May 19-23, 2021

The Biennial Conferences of the ISTM (CISTMs) have been the premiere opportunity for travel medicine specialists and up-to-date practitioners to gather and learn about the latest developments in the field. Delegates attend the conference to keep up to date on advances in the science and the art of travel medicine – they also attend the exposition to see new and innovative technologies, products, and services. In the past decade, travel medicine has emerged as a distinct multidisciplinary medical specialty involving all travel-related aspects of existing medical specialties such as infectious diseases, tropical medicine, gastroenterology, obstetrics and gynecology, occupational medicine, orthopedics, and pediatrics. CISTMs share the advances in the science and art of travel medicine while allowing those new to the field an introduction to this exciting medical discipline.

“The Changing Face of Travel Medicine: Anticipating its Global Impact” has been chosen for the overall theme of the next CISTM in 2021.

Themed subcategories include: Global Impact of Travel (Antimicrobial Resistance, Pollution and environment, Mass gatherings, Cross-border pathogens, Asia Pacific Travel Trends), Healthcare Abroad (Planned care abroad-medical tourism, Traveller’s access to care, Vulnerable traveller/traveller in trouble), Migration and Travel for Work (Global trends, Work force migration, Health related to migration), Travel Medicine and the Travel Industry (Synergy between these two sectors, Responsible practices), Travel Medicine in a Digital World (Cybersecurity in travel, Social Media, The connected traveller-telecommunication and travel, other topics), and the Science of Travel Health (How to Develop a Research Question, Travellers as a Model for Clinical Research, Medical education and training in travel medicine, Diagnostics in Travel Medicine.

Given the COVID-19 crisis, SPC Chairs are assessing the needs of members and planning to modify the program accordingly.

To stay up-to-date, please visit www.ISTM.org/CISTM17
Dear Colleagues,

I would like to begin by expressing my gratitude to the Executive Board for appointment as the Acting ISTM Executive Director. I began my post on March 14, 2020 and my position will run through June 30, 2020 in the first instance. A search committee has been formed with the appointment of Prof Peter Leggat as Chair to make a substantive appointment for Executive Director.

I have had the pleasure of serving ISTM for five years, and bring a strong non-profit background to this position, having over 17 years of experience working with non-profits. I am grateful for the opportunity to support ISTM during this transition and work in collaboration with the board, staff, members and travel medicine community during this time of organizational growth for the society.

We are living in an extraordinary moment with the pandemic outbreak of COVID-19. As a society, we are continually looking at ways to provide extra support for our members and healthcare community. Please visit the ISTM.org website often for updates to our Outbreak Resources. We have a link conveniently located on the homepage to reliable resources including links to helpful statistical information, the newly released PANDEMIC COVID-19 Course, links to our recent COVID digital symposiums, Journal of Travel Medicine COVID-19 articles, and the Travel Med ListServ.

Out of an abundance of caution in the progression of this outbreak, several conferences in which we planned to participate have been cancelled or postponed. ISTM postponed our North American Travel Medicine and Update Course and the RCISTM8 being held in conjunction with the 20th Latin America Congress on Infectious Disease (SADI) and the 5th Latin America Congress on Travel Medicine (SLAMVI). RCISTM8 will now take place November 22-24, 2020. The CTH Examination planned in conjunction with 13th Asia Pacific Travel Health Conference (APTHC) for March was unfortunately cancelled along with the conference. We will be offering the CTH Examination in Atlanta, Georgia, United States of America on September 13, 2020 and Buenos Aires, Argentina on November 21, 2020 prior to RCISTM8.

ISTM is excited to announce that the 2020 North American Travel Medicine Review and Update Course will now be a virtual course and available to our worldwide community. The live course will be held August 14-15, 2020. The course will be online for one year for all who register and those who complete the course will receive CME credit. The Course provides a thorough update and review of the Body of Knowledge for the practice of travel medicine. You do not have to be present for the live course to receive credit; this course platform will allow you to take the course at your own pace online. Read more about the course online here.

It is our hope at the Secretariat that everyone stays strong and healthy during this time of hardship. We want to assure you of our concern and empathy and ask that you keep us informed, if you are able to do so, about the way COVID-19 is impacting you, your clinical practice and your colleagues. We look forward to getting ahead of this novel coronavirus and seeing you all again which will be a very happy occasion to connect.

ISTM Acting Executive Director,
Jodi Metzgar

---

The ISTM, with more than 4,300 members in 100 countries, is the largest worldwide organization of travel medicine healthcare professionals. Members include physicians, nurses, and pharmacists from the private sector, academia, and government entities. Join ISTM today to take advantage of these exclusive benefits:

- Online Member-only community offering access to and discussions with the only worldwide network of people working in travel medicine.
- Clinic listing in the Online Global Travel Clinic Directory linked to the WHO, CDC, and other government agencies.
- Weekly medical and safety travel alerts.
- Member Benefit Webinars and Online Programs as well as informational and educational white papers and case studies free to ISTM Members.
- Special discounts on products travel medicine professionals use every day, only available to ISTM Members.
- Access to the Journal of Travel Medicine, a peer-reviewed scientific publication.
- Eligibility to apply for Research Grants and Bursaries.
- Member discounts for online and in-person educational programs and conferences.

“I have had the pleasure of serving ISTM for five years, and bring a strong non-profit background to this position, having over 17 years of experience working with non-profits.”
GeoSentinel Leadership Team:
- David Hamer, Co-Principal Investigator
- Michael Libman, Co-Principal Investigator
- Andrea Boggild, Chair, Publications Committee
- Kevin Kain, Chair, Enhanced Clinical Surveillance Working Group (ECLIPSE)
- Pat Schlagenhauf, Chair, External Collaborations Committee (ECCo)
- Kristina Angelo, CDC Medical Epidemiologist
- Vanessa Field, Chair, Tracking and Communications Working Group

GeoSentinel Support Team:
- Aisha Rizwan, Program Manager
- Phyllis Kozarsky, Special Advisor on behalf of the CDC

GeoSentinel Committee Chairs:
- Andrea Boggild, Chair, Publications Committee
- Karin Leder, Chair, Data Working Group
- Vanessa Field, Chair, Tracking and Communications Working Group

The first entry of a COVID-19 patient record—a 48-year-old traveller returning from Shanghai and Wuhan, China, was submitted into the GeoSentinel Surveillance Network on January 27, 2020. Within days, cases of COVID-19 were reported from Germany, Japan, Australia, UK, US and Spain, and more soon followed from Norway, Chile, Israel, Hungary, Hong Kong, Canada, and French Guiana. As of April 2 there are 129 records of COVID-19 in the database from 18 different GeoSentinel sites worldwide. Sites were encouraged to report travel-related and non travel-related cases, and to complete a standardized supplemental data collection form, developed by SPRINT SARI, in order to collaborate with the International Severe Acute Respiratory and Emerging Infection Consortium (ISARIC) https://isaric.tghn.org/novel-coronavirus/. We are also hopeful that some GeoSentinel sites will have been able to collect and store acute and/or convalescent serum and/or plasma, and obtain local IRB or ethics committee approval and patient consent, to use those samples in future network research studies.

The GeoSentinel leadership team rapidly developed research ideas that were submitted to the CDC for emergency COVID-19 funding. Supplemental funding to GeoSentinel has been awarded for several enhanced surveillance projects on COVID-19. These have evolved from the original focus given with which this epidemic has been moving. The SMART study which was going to evaluate biomarkers for predicting prognosis in sick febrile travellers has been repurposed to become a COVID-19 severity predictor study.

There have been a few recent publications, both from the GeoSentinel Surveillance Network but also prominent articles on COVID-19 from our site directors (listed below).


In other news, unfortunately, the GeoSentinel annual site directors meeting, planned for Madrid, May 2020, had to be cancelled; it is hoped that the meeting can be rescheduled for later in the year. Recruitment to the position of Data Manager had begun but is currently on hold. However, we are able to proceed with the selection of a web development agency, for a stand-alone GeoSentinel website, which will aim to showcase the network to potential future funders, and at the same time, enable improved internal communications.

We would like to take this opportunity to thank everyone for their efforts at this unprecedented time, and sincerely hope you and your families remain well.

David Hamer, GeoSentinel Co-Principal Investigator

“The GeoSentinel leadership team rapidly developed research ideas that were submitted to the CDC for emergency COVID-19 funding.

Supplemental funding to GeoSentinel has been awarded for several enhanced surveillance projects on COVID-19.”
Globally we are once again confronting a deadly coronavirus which has been extremely challenging for health care systems and all those individuals who work within them.

These are exceptional times and we all need to support and learn from one another whether we are:

- working on the front lines caring for COVID-19 patients
- behind the scenes following contacts or educating the public
- working on research to gain a better understanding of the virus
- developing treatments or vaccines
- or caring for our other patients in our practices or hospitals

NPG would like to extend our support to all our ISTM colleagues throughout the world, especially those who are suffering from major losses, deficits in supplies and equipment, and fatigue of health care workers.

On a personal note, I would like to thank ISTM for providing up-to-date symposiums, webinars and journal articles on COVID-19 and especially for the TravelMed forum, where members are sharing information, cases, articles and research.

One of the goals of the NPG for 2020 was to take a more active role in education at other travel medicine conferences around the globe. We had prepared a workshop and reception for the Asia Pacific conference in New Zealand for March 18, 2020. We are now looking at either a learning module or webinar to present this workshop. Plans change but we still remain committed to the education of our members.

My deepest regards and concerns for all members of ISTM.

Heather Connor,
Nursing Professional Group Chair

The mission of the Pharmacy Professional Group (PPG) is to promote the role and serve as a resource for those pharmacists interested in the practice of travel medicine. The PPG Steering Council has been very busy with several new and continuing projects promoting our mission. Members of the Council are in the process of completing a survey to be distributed on the PPG listserv to help the Council gauge the educational needs of PPG members, particularly pre and post CTH needs, and identify areas where members would like to become more involved. Several members of the PPG are researching Ayahuasca, a decoction with some hallucinogenic properties originally used in spiritual and medicinal ceremonies in the Amazon that has started to gain interest worldwide. It is important that healthcare providers understand the side effects and potential uses so we can educate patients that may be considering Ayahuasca tourism.

The PPG is also working on a joint educational and professional development project with the Professional Education Committee and the Continuing Professional Development Committee. They have developed challenging case scenarios with answers to the scenarios from specialists from around the world.

Continuing projects include the Chair and Chair-Elect working with members of the International Pharmaceutical Federation (FIP) to establish a specialty group for immunization and travel health pharmacists. They have started to develop minimum practice standards; the goal is to complete this for the 2021 FIP Conference. We have extended the travel apps project to include other countries such as Canada. During our research, it was determined that the availability of apps varied depending upon the country. We continually update the database on international regulations on the ISTM website on the PPG page.

continued on next page
Current pharmaceutical recommendations for COVID-19

<table>
<thead>
<tr>
<th>DRUG</th>
<th>SUMMARY OF THERAPEUTIC ACTION</th>
<th>STATUS FOR COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroquine</td>
<td>Originally thought to be useful in the treatment of COVID-19. The mechanism of action is thought to be two fold through increasing endosomal pH and interfering with the glycosylation of cellular receptor of SARS-CoV(1). The correct dose for treatment is unknown and early information has suggested 500mg two or three times daily. This is far greater than doses for malaria and rheumatoid arthritis (main functions). The pharmacokinetic data indicates that there is a very small therapeutic window, and a cause for concern at these doses for adverse effects, and toxicity linked to its long half-life.</td>
<td>Unlicensed in most countries</td>
</tr>
<tr>
<td>Hydroxychloroquine</td>
<td>Hydroxychloroquine possesses an additional molecule to the chloroquine structure but this has shown it to have a better safety profile; and patients able to accept higher daily dosages without side effects. There are various small studies with conflicting results, and robust clinical trials are needed.</td>
<td>Licensed in some countries</td>
</tr>
<tr>
<td>Remdesivir</td>
<td>Remdesivir is an adenosine analogue, which incorporates into nascent viral RNA chains and results in pre-mature termination(10). Developed and successfully used in Ebola treatment, it functions at a stage post virus entry. Preliminary data showed that remdesivir also inhibited virus infection efficiently in a human cell line (human liver cancer Huh-7 cells), which is sensitive to 2019-nCoV. The dose under investigation for treatment of COVID-19 is 200mg intravenously (IV) on day 1 followed by 100mg IV daily for up to 10 days, infused over 30-60 minutes.</td>
<td>Unlicensed</td>
</tr>
<tr>
<td>Teicoplanin</td>
<td>Teicoplanin is an antibiotic which has previously shown to inhibit the first stage of MERS coronavirus cycle in human cells and SARS CoV(11). The mechanism of action is thought to be by inhibiting the low pH cleavage one of the viral spike proteins. Using a daily dose of 400mg, a preliminary study found that the vitro concentration to inhibit 50% of viruses was much lower than the concentration reached in human blood.</td>
<td>Unlicensed</td>
</tr>
<tr>
<td>Lopinavir/ritonavir</td>
<td>Lopinavir is a protease inhibitor used in combination with ritonavir, a live enzyme inhibitor. A study indicated that lopinavir at 4mg/ml and ritonavir at 50mg/ml inhibited SARS CoV-1 after 48 hours of incubation(12). Chinese SARS-CoV-2 guidelines suggest a dose of 400mg/100mg tablets to be taken as two tablets twice daily for up to 10 days. There is very limited data to suggest an improvement over standard care for SARS-CoV-2 and experience suggests this needs to be started early and not as a rescue treatment.</td>
<td>Unlicensed</td>
</tr>
<tr>
<td>DRUG</td>
<td>SUMMARY OF THERAPEUTIC ACTION</td>
<td>STATUS FOR COVID-19</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Favipiravir</td>
<td>Favipiravir is an antiretroviral used in HIV infection. Laboratory trials have also shown it to be effective against Ebola infections in mice.[19] Trial dose was 200 mg per tablet given orally. The dose was 1600 mg twice daily on Day 1 and 600 mg twice daily on Days 2—14. The results found that favipiravir was independently associated with faster viral clearance and a higher improvement rate in chest imaging. These findings suggested that FPV has significantly better treatment effects on COVID-19 in terms of disease progression and viral clearance, as compared with lopinavir/ritonavir.</td>
<td>Unlicensed</td>
</tr>
<tr>
<td>Tocilizumab</td>
<td>Tocilizumab is a monoclonal antibody that inhibits both the membrane bound and soluble interleukin-6 (IL-6) receptors[20]. In COVID-19 patients, cytokine storming and hyperinflammatory states have been documented. In the recent publication from China, tocilizumab is listed as a treatment. The recommended dose is 4-8 mg/kg or 400mg standard dose IV once, with the option to repeat a dose in 12 hours (not to exceed a total dose of 800mg). The optimal timing of the use of tocilizumab is unknown, as is the safety and efficacy profile[21]. * Sarilumab is another IL-6 agent in clinical trials for COVID-19.</td>
<td>Licensed in China</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>The idea of using corticosteroids to reduce the inflammation and inflammatory cascade is unknown as they are often used in conjunction with other medications. Their use in cytokine storms and rapidly progressive pneumonias remains unknown[22]. Chinese guidelines suggest that large doses may suppress the immune system and could delay the clearance of SARS-CoV-2 and recommend 0.5-1mg/kg/day of methylprednisolone for up to 7 days.</td>
<td>Licensed for general anti-inflammatory actions.</td>
</tr>
<tr>
<td>Ribavirin/interferon</td>
<td>Ribavirin is an analogue that terminates RNA synthesis and in tests appeared to be more potent than remdesivir. The WHO research and development plan for SARS-CoV-2 considered it unviable due to its toxicity profile and poor outcomes. Interferons may stimulate anti-viral responses to SARS-CoV-2. Chinese guidelines recommend a dose of 500mg IV two or three times a day in combination with lopinavir/ritonavir. Interferons pose a significant risk to critically ill patients and in the absence of supportive data are not recommended[23].</td>
<td>Licensed in China</td>
</tr>
<tr>
<td>Oseltamivir</td>
<td>Oseltamivir is originally used due to its actions against influenza. Oseltamivir has an action as a neuraminidase inhibitor. Coronaviruses are known not to use neuraminidase and therefore it is expected there would be no beneficial action against SARS-CoV-2[24].</td>
<td>Unlicensed</td>
</tr>
</tbody>
</table>

References:

Derek Evans, Pharmacist Professional Group Chair
PANDEMIC COURSE

PANDEMIC: Prevention and Emergency Management in COVID-19

This course is provided free of charge and will be available for 12 months.

CONFLICT OF INTEREST DISCLOSURE

SelfStudy provided the International Society of Travel Medicine use of the SelfStudy platform for the PANDEMIC course free of charge for unlimited users for a period of 12 months. This donation agreement was initiated by the personal relationship between Pradeepa Siva, SelfStudy Inc.’s Business Development Consultant, and the current ISTM Board President, Lin Hwei Chen.

DATA COLLECTION

ISTM will not collect or store any user data for the PANDEMIC course. SelfStudy only collects login information created by users and generic course usage information (i.e. total number of users). No personal user data will be requested or stored and all data collected is voluntary.

Continuing Professional Development (CPD) credit is available upon completion of the course, but is self-reporting and copies of personalized certificates are not stored by either ISTM or SelfStudy.

To access the Course, please click here.
Membership of the Faculty of Travel Medicine

Associate membership is now available to those who have completed the ISTM Certificate In Travel Health™ issued by the International Society of Travel Medicine.

The Faculty of Travel Medicine is leading the way in helping to raise standards of practice and achieve greater uniformity in provision of services in order to protect the health of the traveller. There are many benefits of membership:

• Demonstrate your proven expertise and experience with our Associate post-nominal, AFTM RCPS(Glasg)
• Join a thriving, global community of nurses, pharmacists and doctors practising travel health
• Enhance your knowledge and skills – we are the leading body setting standards and providing education in travel medicine
• Stay up to date with the latest in travel health – we have webinars and a regular interactive magazine
• Receive access to the leading journal for travel medicine – Travel Medicine and Infectious Disease

Emporiatrics

Members of ISTM can also access the latest edition of Emporiatrics which includes COVID-19 content. The issue can be viewed at rcp.sg/emporiatrics

FOR MORE INFORMATION AND APPLICATION FORMS VISIT rcp.sg/joinustravel

The ISTM Slide Set has just been updated in 2017 and split into four chapters:

Chapter 1: Introduction to Travel Medicine
Chapter 2: Travel Topics and Special Conditions
Chapter 3: Travel Vaccines
Chapter 4: Vector-borne Diseases

Members can purchase one or all four at a discount. Visit the ISTM Website at www.ISTM.org for more information.

We would like to thank the ISTM Professional Education Committee for updating these slides.