LIVE WEBCAST

Business Strategies
DURING THE PANDEMIC

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MKE HEALTH & ECONOMY BRIEFING

On Wisconsin’s Afternoon News
Tuesday @ 4:20pm

John R. Raymond, Sr., MD
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President and CEO

Tim Sheehy
MMAC President

620 WTMJ
Wisconsin’s Radio Station

Medical College of Wisconsin

Metropolitan Milwaukee Association of Commerce
COVID-19 Update

John R. Raymond, Sr., MD
President and CEO
Medical College of Wisconsin

Analytics by Andrew Yaspan
MCW Institute for Health and Equity
COVID-19 DIAGNOSTIC TESTING – 08.10.2020

• Cumulative tests (people) reported as of 08.10.2020: WI = 1,062,463; MKE = 208,007
  - Negative WI 1,001,402  Negative MKE 186,878
  - Positive WI 61,061 (5.7% stable)  Positive MKE 21,129 (10.2% stable)
  - # of tests reported yesterday in Wisconsin = 8,167
  - Highest single daily total was 17,410 on 08.04.2020

• Testing capacity: Stable at 24,156 in Wisconsin. New concerns about supply chain!
  - 83 laboratories currently testing. 24 planning to test.

• Daily positive tests (# positive has been >1,000 multiple times recently)
  - Wisconsin = 507 (6.2%); MKE = 116 (6.4% seven-day average)
  - Daily positives are trending SLOWLY downward (favorable). Positivity rate is trending SLOWLY downward (favorable)
  - Numbers of positive tests and positivity rate are early indicators
  - Previous highest daily positive tests: WI: 1,165 on 08.08.2020; MKE: 477 on 05.29.2020
COVID-19 HOSPITAL METRICS – 08.10.2020

• Number of cumulative hospitalizations: **5,031** (8.3% of positive tests)

• Wisconsin hospitalizations on 08.09.2020
  - 414 inpatients - rising (high was 446 on 04.09.2020; low 235 on 07.04.2020)
  - 119 in ICU – rising (high was 196 on 04.09.2020; low was 65 on 07.05.2020)
  - Hospitalizations and ICU use are lagging indicators

• ICU capacity: **312** available ICU beds - declining

• Ventilator capacity **1,641** - Stable

• PPE trends: **Stable** (most critical needs = gowns, goggles and paper masks)
  - There are new concerns about PPE supply chains

Learn more at [covid19.mcw.edu](http://covid19.mcw.edu)
VARIOUS COVID-19 INDICATORS – 08.10.2020

• Death is a **highly lagging indicator.** Case fatality rate = 1.6%

• Cumulative deaths:  
  - Male:  
    - WI = 536 (53.7%)  
    - MKE = 210 (53.6%)  
  - Female:  
    - WI = 462 (46.3%)  
    - MKE = 182 (46.4%)  
  - Black/African American:  
    - WI = 212 (21.2%)  
    - MKE = 149 (38.0%)  
  - White:  
    - WI = 710 (71.1%)  
    - MKE = 171 (43.6%)  
  - Hispanic/Latin:  
    - WI = 119 (11.9%)  
    - MKE = 57 (14.5%)  
  
  o Totals exceed 100% due to overlap between Black/AA and Hispanic/Latin categories

• Doubling time for positive tests:  
  - WI = 36.4 days; MKE = 45.3 days

• Daily growth rate of positive tests (last 7 days):  
  - WI = 1.4%; MKE = 0.9%

• Reproductive number:  
  - WI = 0.96; MKE = 0.95 (early indicator)
We took a troubling turn in Mid-June.

MKE Mask Ordinance

WI Mask Order

40 days > 1.0
WISCONSIN COVID-19 CASES VS DEATHS

Lag time between new cases and deaths includes:
- hospitalization, ICU,
- secondary spread to others,
- symptom development,
- hospitalization, ICU

5-week lag
Parameswaran Hari, MD, MRCP, MS
Chief and Professor
Hematology and Oncology
Medical College of Wisconsin
CONVALESCENT PLASMA

Donors Recovered from Covid-19

Blood

Consecutive Infusions (400 mL total)

Donor Apheresis

Matching: ABO- Compatible

Critically Ill with COVID-19

200 mL

Plasma

200 mL

Plasma

National Program FDA/Mayo - >60 000 pts treated; caused mortality to decrease

MCW – Versiti Program (AHW trial) – aims to also study the immunology of COVID-19

We have treated ~ 150 pts at Froedtert (v. low mortality in treated patients)

SARS-CoV-2

Neutralizing Antibody


Illustration Credit: David H. Spach, MD
Figure out the structure of the Protective Antibody and manufacture commercially.
Silvia Munoz-Price, MD, PhD
Enterprise Epidemiologist
Professor of Medicine
Department of Medicine -
Division of Infectious Diseases
Froedtert and the Medical College of Wisconsin
TREATMENT OPTIONS

- Remdesivir
- Dexamethasone
- Convalescent plasma
DEXAMETHASONE

• RECOVERY TRIAL
• 6 mg daily for 10 days
• Lower mortality at 28 days among patients on mechanical ventilation requiring oxygen
REMDESVIR

- Antiviral drug
- IV for 10 days
- Hypoxemic, Symptoms for less than 12 days
- Time to clinical improvement was shorter. No data yet on survival.

Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial

Xiaoyi Wang, Zhaoyang Zhang, Guanghua Xu, Fanghui Du, Jianging Zuo, Yijun Jin, Shouchi Su, Jing Gao, Zhenshan Cheng, Qinfu Lu, Yifu Gu, Guanquan Li, Ke Wang, Yang Li, Hongliang Li, Shufeng Wang, Shuhui Bao, Chengyong Yang, Chunlin Mai, Yi Wang, Dan Ding, Feng Wu, Xin Tang, Xianzhi Ye, Yingzhi Ye, Bining Gu, Jie Yang, Wenyao Ai, Aihong Wang, Guangpan Fan, Fai Zhao, Zhiqin Liu, Xiaoying Guo, Jiayang Xu, Linhuan Shang, Yi Zhang, Linqian Cao, Tingting Gao, Yan Wan, Hong Qiu, Yuchen Jiang, Thomas Jaki, Frederick G. Hayden, Peter Whitley, Binh Cao, Chen Wang

Summary

Background No specific antiviral drug has been proven effective for treatment of severe coronavirus disease 2019 (COVID-19). Remdesivir (GS-5734), a nucleoside analogue produg, has inhibitory effects on pathogenic animal and human coronaviruses, including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in vitro, and inhibits Middle East respiratory syndrome coronavirus, SARS-CoV-1, and SARS-CoV-2 replication in animal models.

Methods We did a randomised, double-blind, placebo-controlled, multicentre trial at ten hospitals in Hubei, China. Eligible patients were adults (aged ≥18 years) admitted to hospital with laboratory-confirmed SARS-CoV-2 infection, with an interval from symptom onset to enrolment of 12 days or less, oxygen saturation of 94% or less on room air or a ratio of arterial oxygen partial pressure to fractional inspired oxygen of 306 mm Hg or less, and radiologically confirmed pneumonia. Patients were randomly assigned in a 2:1 ratio to intravenous remdesivir (200 mg on day 1 followed by 100 mg on days 2–10 in single daily infusions) or the same volume of placebo infusions for 10 days. Patients were permitted concomitant use of lopinavir–ritonavir, interferons, and corticosteroids. The primary endpoint was time to clinical improvement up to day 28, defined as the time (in days) from randomisation to the point of a decline of two levels on a six-point ordinal scale of clinical status (from 1:discharged to 6:death) or discharged alive from hospital, whichever came first. Primary analysis was done in the intention-to-treat (ITT) population and safety analysis was done in all patients who started their assigned treatment. This trial is registered with ClinicalTrials.gov, NCT04257566.

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See Comment page 1025
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Department of Pulmonary and Critical Care Medicine, Center of Respiratory Medicine, National Clinical Research Center for Respiratory Diseases (Wang W, Li J, Zhao Q), Zhong Dong MD, Shanghai MD, Yizheng MD, Prof, Cao Min MD, Prof C. Wang MD, and Institute of Clinical Medical Sciences
CONVALESCENT PLASMA (MAYO CLINIC STUDY)

- Preliminary results from 3,000 COVID-19 patients.
- Plasma was associated with fewer deaths when administered in three or fewer days of the patients’ COVID-19 diagnoses.
- 7-day mortality among those who received high antibody plasma concentration 6.6% vs. 15.4% among low antibody plasma concentration.
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LIVE WEBCAST
Business Strategies During the Pandemic
coronavirus-MMAC.org

Resources for Milwaukee businesses during the pandemic including:

• Safety & Health Toolkit
• PPE Product Marketplace
• Best practices for operating safely
• Replay our pandemic programming:


Tuesdays @ 11am

Find the REPLY of this episode in MMAC’s emails or at coronavirus-mmac.org/webinars