



Saudi-Canada Critical Care Collaboration



The Saudi Critical Care Society will hold a scientific meeting during the Canadian Critical Care Forum (CCCF) on Oct 25-29, 2009 to present the most recent research activities from Saudi Arabia. This reflects the high level of collaboration between the two communities.

The Canadian Critical Care Forum is the Canada's largest and most internationally recognized conference attended by more than 1,200 physicians, respiratory therapists, nurses, pharmacists and other health care professionals. An outstanding faculty designs a program on leading edge science through lectures, workshops, interactive sessions and a major trade fair. For more information visit www.criticalcarecanada.com

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Congratulations



The Intensive Care Department would like to congratulate our research coordinators, Dr. Asgar and his wife Dr. Gousia for the birth of their first son Rayan, life will be different now and we wish you the best.

We also congratulate our ICU team for their **“Third Place Award”** by the Scientific Committee of the 7th Annual Scientific Conference of the Saudi Thoracic Society, which was held on 17-19 March 2009, for the abstract titled “Critical Care Response Team the most Trigger Criteria Associated with Highest ICU Admission Rate”. Good work!!

American Thoracic Society (ATS) 2009 Meeting

13 abstracts were accepted for presentation at the American Thoracic Society in San Diego, May 2009. The department congratulates all who participated in these abstracts. Remember, it is time now for making the posters.

10% of enrolments in DECRA study from KAMC



DECRA is a multicentre, prospective randomized controlled trial in patients with severe Traumatic Brain Injury and refractory ICP, comparing early Decompressive Craniectomy with best current management.

So far, KAMC had 13 patients enrolled in this trial out of 136 patients recruited (10%). The following list of achievements was cited in DECRA newsletter March 2009:

- ⇒ King Fahad
- ⇒ John Hunter
- ⇒ Liverpool
- ⇒ Royal Melbourne

Critical Care Research Course near the end.. Will be followed by Weekly ICU Research meeting

The Intensive Care Department would like to thank all consultants who presented in the course and helped in its success. The department will continue its efforts to educate on clinical research. Future plans include workshops on SPSS, assistance on data collection and management of ICU research projects.

After the completion of the critical care research course, the department will hold weekly meetings from 2:00-4:00 pm to discuss new research proposals and current research works.

Upcoming ICU Research Forum

The Intensive Care Department Research Team at KAMC will hold the following presentations in the ICU/Burns conference room.

March 30, 2009 from 2:00-4:00 pm:

- ⇒ “RCT of early versus late tracheostomy”. By Dr. Haddad
- ⇒ “RCT permissive underfeeding”. By Dr. Arabi
- ⇒ “Etomidate in cirrhotic patients with septic shock”. By Dr. Cherfan

April 08, 2009 from 2:00-4:00 pm:

- ⇒ “Intra-abdominal pressure and outcome in cirrhotic patients”. By Dr. Al-Dorzi
- ⇒ “Etomidate in cirrhotic septic patients” By Dr. Cherfan
- ⇒ “Adrenal function in cirrhotic patients with septic shock”. By Dr. Arabi

PROTECT investigators meeting in Jeddah on Feb 2009...



PROTECT is an international, multi-center, prospective, concealed, randomized controlled trial among medical-surgical critically ill patients comparing the effect of low molecular weight heparin (LMWH) to unfractionated heparin on the primary outcome of proximal lower limb deep venous thrombosis and the secondary outcomes of pulmonary embolism, bleeding, heparin-induced thrombocytopenia and thrombosis at any site.

Dr. Sultan is the site investigator of this study. 19 patients were recruited from KAMC since the beginning of the study.

Saudi Arabia Recruitment – March 9, 2009

PROTECT Center	Investigator	Research Coordinator	1st Patient Enrolled	Patients Randomized
King Faisal Hospital, Jeddah	I Qushmaq	J Brennick, S Bassi	10/2006	26
National Guard, Riyadh	M Al Sultan Y Arabi	A Cherfan R Jacoba	11/2007	19
King Abdulaziz, Jeddah	J Al-hashemi	S Shalabi	9/2008	22
King Fahad University, Riyadh	M Al-Hazmi A Al Alzem	T Wyngaard Y Moustafa	4/2008	7
Riyadh Military Hospital, Riyadh	Y Mandourah N Shaikh	N Shaikh	11/2008	3

[KAMC ICU participates in a landmark study on patient safety published in BMJ and BBC news](#)

KAMC ICU (represented by Dr. Arabi & Dr. Al-Qahtani) was the only Middle Eastern center who participated in a landmark study on patient safety, the Sentinel Events Evaluation study (SEE 2). This study was published in BMJ and appeared in BBC news. For more details, please visit the following web sites:

http://www.bmj.com/cgi/content/full/338/mar12_1/b814

<http://news.bbc.co.uk/2/hi/health/7938320.stm>

<http://www.hsro-esicm.org/index1.html>

[KAMC ICU participates in MOSAICS study](#)

KAMC is the trial coordinator center in Saudi Arabia. 20 countries and 179 ICUs are participating. Dr. Hasan Al-Dorzi will attend MOSAICS investigators meeting in China on the 3rd of April, 2009. He will also present in the 6th Asian Ventilation Forum in Chengdu on discontinuation of mechanical ventilation.

[OSCILLATE Study Approved](#)



The OSCILLATE study has been approved by the Canadian Institutes of Health Research (CIHR). King Abdulaziz Medical City is co-applicant on this major multi-center study comparing high frequency ventilation and convention ventilation in patients with Acute Respiratory Distress Syndrome. Principle investigators are Dr. Niall Ferguson and Dr. Maureen Meade. Investigators at KAMC are Dr. Yaseen Arabi, Dr. Haytham Tlayjeh, and the participants from the RT department, Mr. Fuad Alghamdi, Mr. Hasan Jebreen, Mr. Engardo Tabhan, Ms. Marie Charina Olay, and Ms. Olivia Dulfo.

[A study from KAMC included in a recent meta-analysis ...](#)

A study from KAMC "**The Intensive versus conventional insulin therapy: A randomized controlled trial in medical and surgical critically ill patients**", Clinical investigators: Y. Arabi, MD, O. Dabbagh, MD, H. Tamim, MD, A. Alshimemeri, MD, Z. Memish, MD, S. Haddad, MD, S. Syed, MBBS, H. Giridhar, MBBS, A. Rishu, MBBS, M. Aldaker, MD, S. Kahoul, RN, R. Britts, RN, M. Sakkijah, RD. (Critical Care Medicine: volume 36(12) December 2008 pp 3190-3197) was included in a recent "**meta-analysis including NICE-SUGAR study data**". D. Griesdale, MD, R. de Souza, MD, R. Van Dam, PhD, D. Heyland, MD, D. Chittock, MD, S. Finfer, MBBS, D. Talmor, MD. (Canadian Medical Association Journal 2009; 180(8): 821-827).

[Accepted Publications](#)

1. "**Hypoglycemia with Intensive Therapy in Critically Ill Patients: Predisposing Factors and Association with Mortality**". Y. Arabi, MD, H. Tamim, PhD, and A. Rishu, MBBS. Published in Critical Care Medicine.
2. "**Medical Simulation, a Review: unique opportunities to improve training, crisis management and patient safety**". P.G. Brindley, MD, Y. Arabi, MD. Published in Saudi Medical Journal.
3. "**The impact of time to tracheostomy on mechanical ventilation duration, length of stay, and mortality in intensive care unit patients corrected proof**". Y. Arabi, MD, J. Alhashemi, MD, H. Tamim, PhD, A. Esteban, MD, S. Haddad, MD, A. Aldawood, MD, N. Shirawi, MD, A. Alshimemeri, MD. Published in Journal of Critical Care.
4. "**Heparin-Induced Thrombocytopenia (HIT) Syndrome**". A. Gouda, MD, A. Alshimemeri, MD, Y. Arabi. Published in Critical Care and Shock.

Miscellaneous News

- ◆ Several of ICU staff attended "Introduction to Clinical Research" course done in KAMC postgraduate center on the 25th and 26th of February, 2009 this attendance is applauded and encouraged.
- ◆ Dr. Hasan Al-Dorzi participated in the Saudi Arabia Venous ThromboEmbolism (SAVTE) Advisory group meeting on March 17th, 2009 in Riyadh. He presented on the VTE study performed by the department. Briefly, the study is a prospective observational study of 1000 patients admitted to the ICU and examines VTE prophylaxis practices and outcomes. Dr. Arabi is the chairman of SAVTE Research Task Force. One of its goals is promoting national multicenter research on VTE.

Question of this issue:

What is the Receiver operating characteristic (ROC) curve?

The ROC curve is a plot of the true positive rate (sensitivity) against the false positive rate (specificity) for the different cutpoints of a diagnostic test. It evaluates its ability to discriminate between healthy and diseased people. It can also be used to compare two different tests and to select an optimal cut-off value for a test (see figure).

The closer the curve follows the left-hand border and then the top border of the ROC space, the more accurate the test. Two or more tests can be compared by considering the area under each curve, the test with the greater area is better. The accuracy of a diagnostic test is classified according to the area under the curve (AUC) as follows:

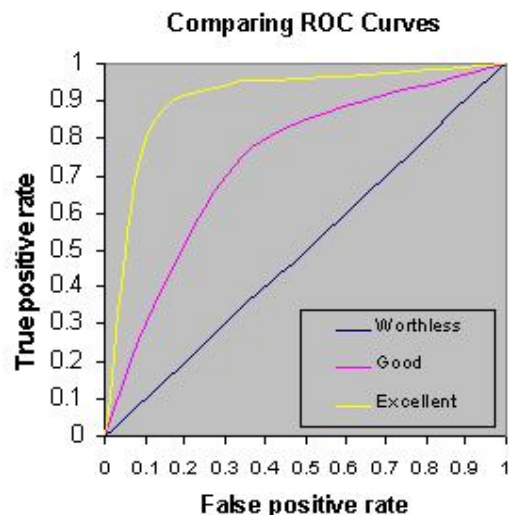
AUC: 0.90-1 = excellent

0.80-0.90 = good

0.70-0.80 = fair

0.60-0.70 = poor

0.50-.60 = fail



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&

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