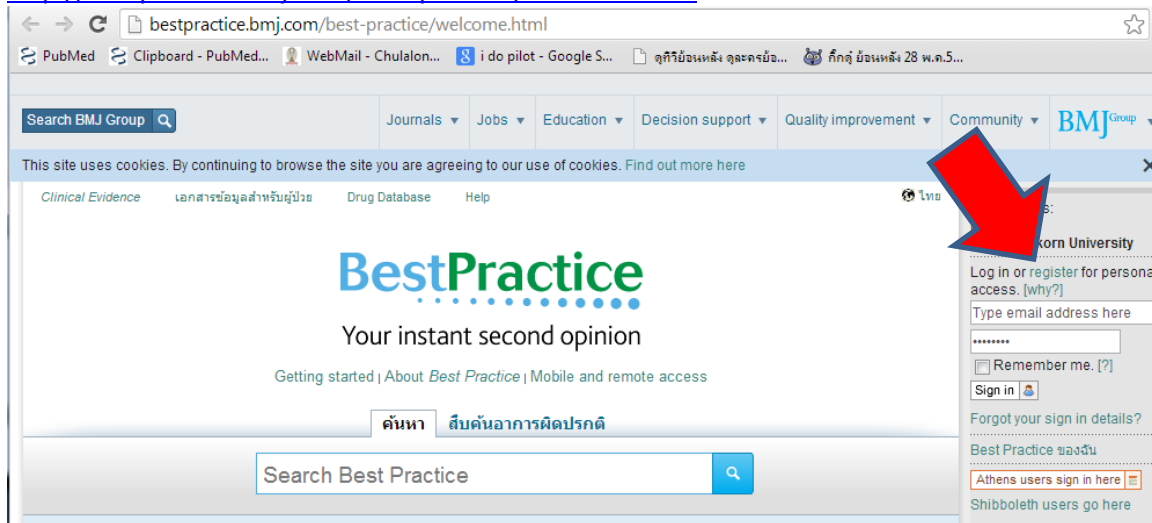


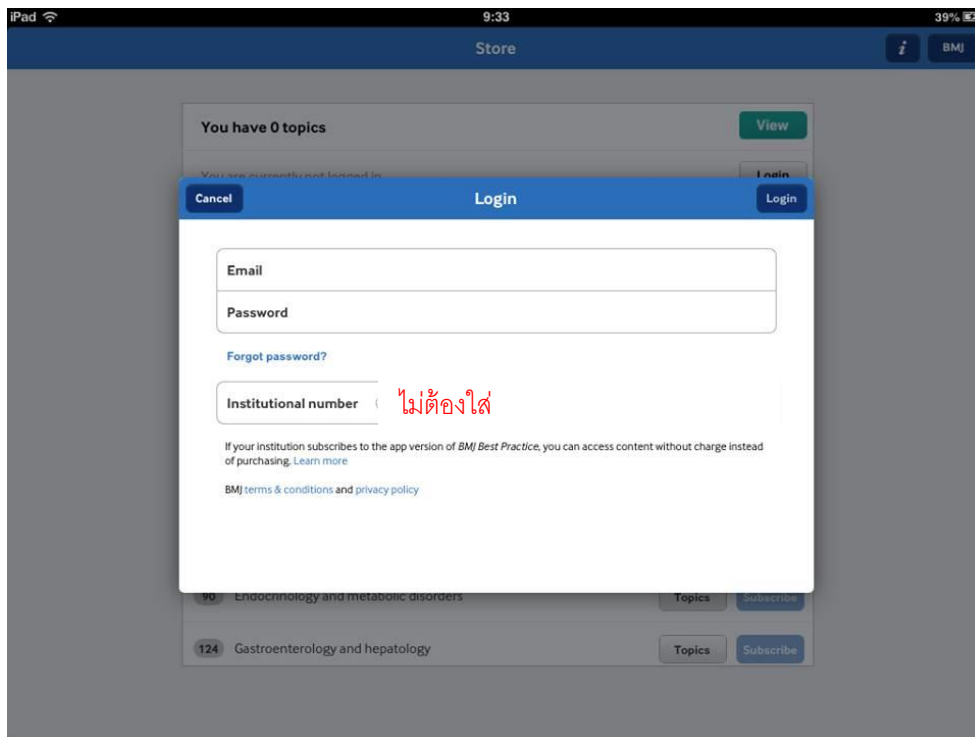
วิธีติดตั้ง BMJ Best Practice APP on IOS

1. Register Email / Password โดยใช้เน็ต / wifi ของจุฬาราชบุรี

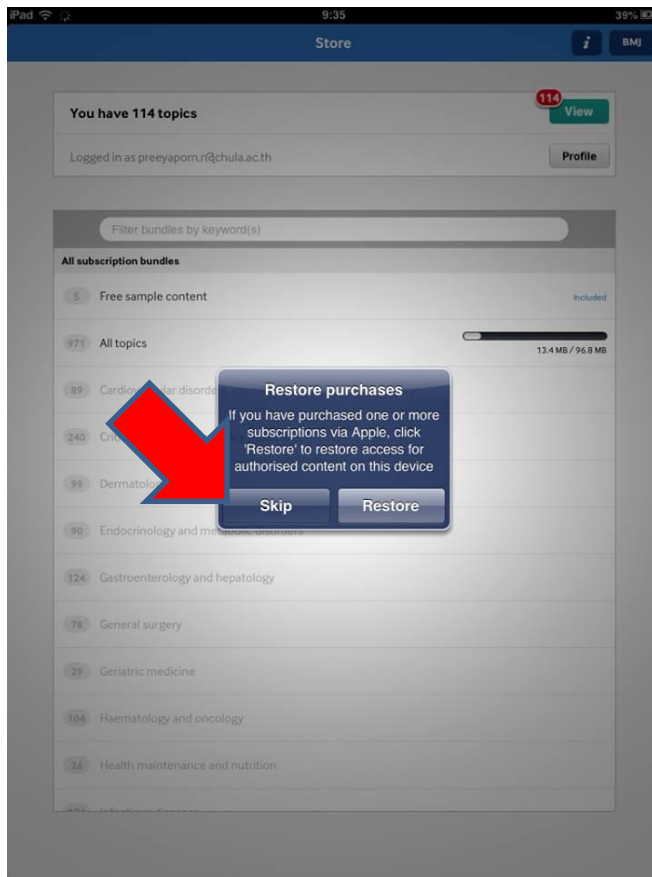
<http://bestpractice.bmj.com/best-practice/welcome.html>



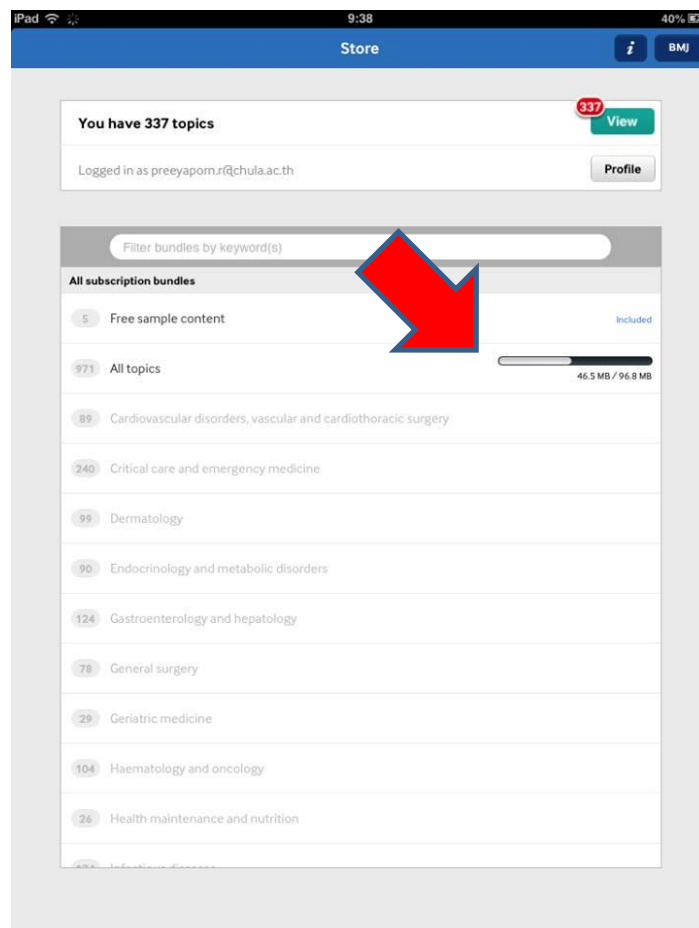
2. การติดตั้ง app ต้องการ Email / Password ที่ สร้างจากข้อ 1



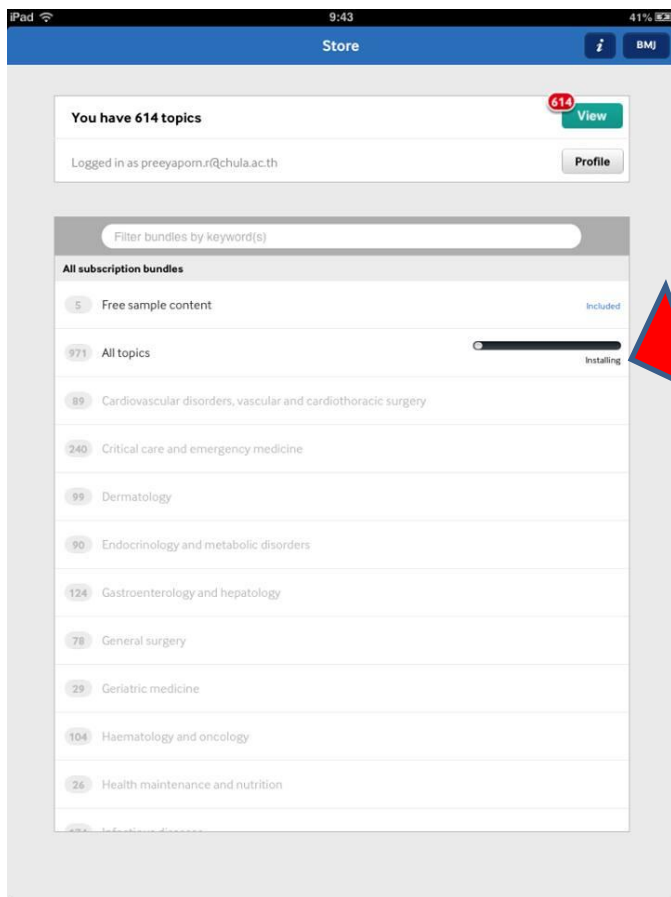
3. คำถาม Restore purchases ให้คลิก SKIP



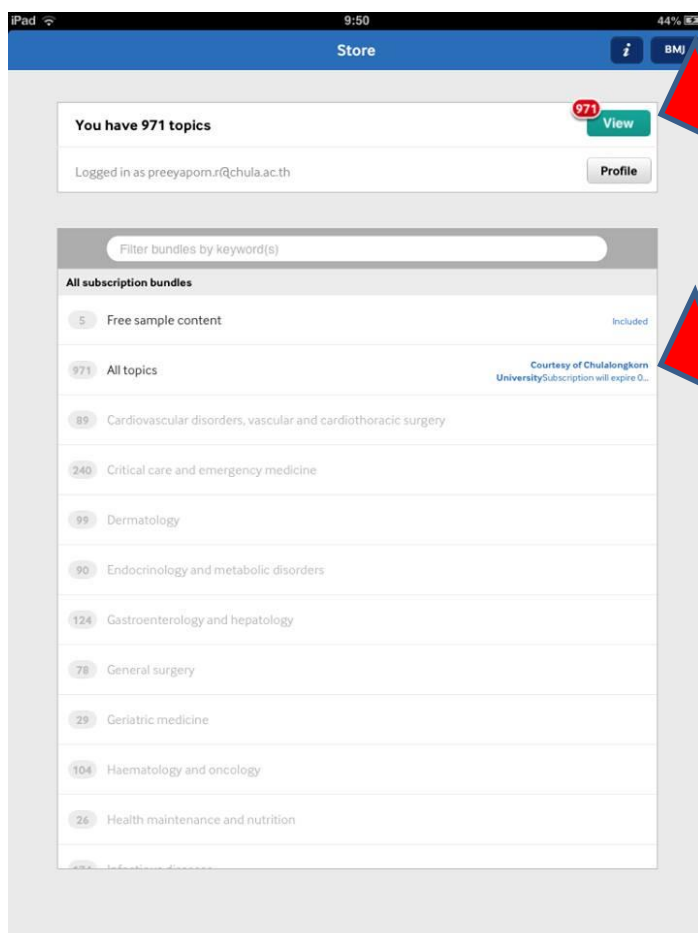
4. หน้าจอติดตั้งโปรแกรม 1 หลังกด SKIP



5. หน้าจอติดตั้งโปรแกรม 2 โปรดสังเกตข้อความที่เพิ่มเข้ามา คือ **Installing**



6. หน้าจอเมื่อติดตั้งเสร็จข้อมูลเสร็จแล้ว “Courtesy of Chulalongkorn Univ. subscription will expire on ...
คลิกที่ View เพื่อดูข้อมูลได้



7. หน้าจอข้อมูล

The image displays two screenshots from the BMJ Best Practice app on an iPad. The top screenshot shows the 'Categories' screen, where 'Critical care medicine' is selected. The bottom screenshot shows the 'Liver dysfunction' article, which includes an overview, summary, and detailed text about liver chemistry tests.

Categories

Category	Count
All topics	2
Allergy and immunology	2009 Influenza A (H1N1) virus
Cardiology and vascular medicine	Abdominal aortic aneurysm
Cardiothoracic surgery	Abdominal compartment syndrome
Cardiovascular disorders	Abdominal injury
Critical care medicine	Abdominal pain in children
Dermatology	Abdominal pain in pregnancy
Ear, nose, and throat	Abdominal trauma
Emergency medicine	Abnormal LFTs
Endocrinology and metabolic disorders	Abnormal liver function tests
Gastroenterology and hepatology	Abruptio placentae
General surgery	Abscess, retropharyngeal
Genetics	Abuse, child
Geriatric medicine	Abusive head trauma in infants
Haematology	Acid-base abnormality
Health maintenance	Acid-base disorder
Infectious diseases	Acidosis, metabolic
Nephrology	Acidosis, respiratory
	Acute abdomen
	Acute abdomen in children
	Acute aspiration

Liver dysfunction

Overview: Summary
Liver dysfunction last updated: Sep 04, 2013

Serum liver chemistry tests, commonly called liver tests, or (mistakenly) liver function tests, are ordered for many reasons. Most laboratories offer these tests as a bundle, and this usually includes:

- Bilirubin (breakdown product of the RBC after conjugation in the liver and secretion in biliary system excretion)
- Aspartate aminotransferase (AST; formerly called serum glutamic-oxaloacetic transaminase or SGOT)
- Alanine aminotransferase (ALT; formerly called serum glutamic-pyruvic transaminase or SGPT)
- Gamma-glutamyl transpeptidase (gamma-GT)
- Alkaline phosphatase (alk phos)
- Lactate dehydrogenase (LDH).

Individual tests in these panels are not specific for liver disease. Therefore, pattern recognition is critical. Isolated elevation of liver tests is a less common occurrence in liver diseases, and a non-hepatic source should also be considered in such instances. Assessment of patients with abnormal liver tests should be guided by history, risk for liver disease, duration and severity of clinical findings, presence of comorbidities, and the nature of the liver test abnormality noted.

Traditionally, liver tests abnormalities have been grouped under the following patterns:

- Hepatocellular (predominant ALT and AST elevations)
- Cholestatic (predominant alk phos elevation) [REF 1]
- Infiltrative/mixed.

Bilirubin may be elevated in any category of liver disease, and this does not aid in the classification. [REF 2] Isolated gamma-GT elevations are so common and so often unhelpful that many institutions have chosen to delete this test from their liver test panel. [REF 3] When other liver tests are abnormal, categorisation according to the pattern found is clinically valuable in the process of finding the possible aetiology of the liver disease. However, liver tests can be abnormally elevated in 1% to 4% of the asymptomatic population, and further investigations reveal that 6% of these patients have no obvious cause for liver disease (liver histology may be normal). [REF 4] [REF 5] In addition, people with liver disease may have normal tests (16% of patients with hepatitis C and 13% of patients with varying histological damage due to non-alcoholic fatty liver diseases have persistently normal tests). [REF 6] Liver tests may also be normal in people with hepatitis B who are in the immune-tolerant phase and in the inactive HBsAg carrier state. [REF 7] [REF 8]

Functional assessment of the liver (evaluating protein synthesis, metabolism, bile production, storage, and detoxification) can be determined by: [REF 9]

- Conventional liver tests such as albumin and INR; these tests reflect the liver function
- Scoring systems such as Model for End-Stage Liver Disease (MELD) and Child-Turcotte-Pugh (CTP) score, based on laboratory test results and clinical features.

More definitive assessment can be obtained by quantitative assays. However, these are relatively difficult to perform and are not easily available. Techniques include: [REF 10]