

Umbrella Consortium for Assessment Networks



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24.05.2014



What is UCAN?



- ◆ Started in 2006 in Heidelberg, Munich & Berlin
- ◆ Non-profit, academic organization
- ◆ Only the costs are shared annually
- ◆ No sales taxes

- ◆ Objectives:
 - ◆ Common exchange in the field of assessment
 - ◆ Quality assurance, establishment of standards
 - ◆ Optimization of resources
 - ◆ Support innovative formats
 - ◆ Further development & research

UCAN today: 58 partners in 7 countries

4,900 users & 1,450 groups

Germany



- ◆ 20 medical schools
- ◆ 8 dental schools
- ◆ 9 medical associations

Switzerland



- ◆ 1 medical school
- ◆ 1 university of applied sciences

Sweden



- ◆ 1 medical school

Australia



- ◆ 4 medical schools

Netherlands



- ◆ 1 medical school
- ◆ 3 midwifery academies (PT)

Austria



- ◆ 2 medical schools
- ◆ 1 dental school
- ◆ 1 nursing science school

Poland



- ◆ 1 medical school

Europe



fmch
foederatio medicorum
chirurgicorum helvetica



UCAN: the tools

- ◆ ItemManagementSystem:
 - ◆ Question- and Item management & exchange
 - ◆ Assessment management
 - ◆ Review system
- ◆ Document reader system: Klaus
- ◆ Computer-based assessment: CAMPUS
- ◆ Tablet-based assessment: tOSCE, soon: tEXAM & tORAL
- ◆ Examiner:
 - ◆ Grade calculation
 - ◆ Statistical analysis

Web-based ItemManagementSystem

User **Items**

Pool-Filter

- Personal Pool
- Group-Pool
- Public-Pool

Classification-Filter

- Allgemeinmedizin
- Anatomie
- Chemie, Biochemie, Moleku...
- Innere Medizin
- Kinderheilkunde

Itemtype-Filter

- Type A
- Type KPrim
- Type KPrim?
- Type Pick-N
- PickN with list
- Long Menu
- Freetext
- Extended Matching
- Keyfeature
- Starshaped Patterns
- M2
- Osce

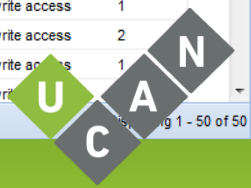
Welcome | examinations | **Innere Klausur SS 11**

Description | **Content (Version 1)** | Blueprint | Review | Comment | Score | History | Authorization

Version | View | new accesslevel | add items | update | Review | Edit | remove | preview | export | Search

	Title	Type	Comm...	Review	Difficulty	Discriminat...	section	Actuality	Author	Authorization	Entity u...
1	Mitralsuffizienz	Type A		★★★★★ (1)	0.91 / 0.91	0.25 / 0.25	Kardiologie	current	Bekeredjian, Raffi	write access	2
2	Studentenfrage WS 0809: 65-jähri...	Type A		★★★★★ (1)	0.78 / 0.78	0.26 / 0.26	Studentenfragen	current	Krautter, Markus	write access	3
3	Ausbelastung	Type A		★★★★★ (1)	0.96 / 0.96	0.15 / 0.15	Sportmedizin	current	Schommer, Kai	write access	1
4	Child-Pugh-Score	Type A		★★★★★ (1)	0.83 / 0.83	0.29 / 0.29	Gastroenterologie	current	Roos, Katja	write access	2
5	Nierenersatzverfahren	Type A		★★★★★ (1)	0.95 / 0.85	0.14 / 0.39	Nephrologie	current	Krautter, Markus	write access	7
6	I. Grundprinzip sozialen Sicherung	Type A		★★★★★ (1)	0.95 / 0.95	0.23 / 0.23	Allgemeinmedizin	current	Glassen, Katharina	write access	1
7	VHF	Type A		★★★★★ (1)	0.66 / 0.66	0.26 / 0.26	Kardiologie	current	Bekeredjian, Raffi	write access	1
8	Nebenwirkung von Metformin	Type A		★★★★★ (1)	0.99 / 0.92	0.21 / 0.31	Studentenfragen	current	Jünger, Jana	read access	8
9	Studentenfrage: Eisenmangelanämie	Type A		★★★★★ (2)	1.00 / 1.00	- / 0.00	Studentenfragen	current	Jünger, Jana	write access	6
10	Dialyseindikation 3	Type A		★★★★★ (1)	0.65 / 0.65	0.24 / 0.24	Nephrologie	current	Krautter, Markus	write access	1
11	Seminar 3: Centor Score	Type A		★★★★★ (1)	0.71 / 0.71	0.27 / 0.27	Allgemeinmedizin	current	Glassen, Katharina	write access	2
12	IV: Ankle-Brachial-Index	Type A		★★★★★ (1)	0.82 / 0.82	0.21 / 0.21	Allgemeinmedizin	current	Glassen, Katharina	write access	1
13	II: Diarrhoe und Erbrechen	Type A		★★★★★ (1)	0.99 / 0.99	0.01 / 0.01	Allgemeinmedizin	current	Glassen, Katharina	write access	1
14	Studentenfrage: Hepatische Enzep...	Type A		★★★★★ (1)	0.98 / 0.98	0.26 / 0.26	Studentenfragen	current	Jünger, Jana	write access	10
15	ITP	Type A		★★★★★ (1)	0.89 / 0.89	0.15 / 0.15	Hämatologie	current	Rohlfing, Sarah	write access	2
16	CML Therapie	Type A		★★★★★ (1)	0.48 / 0.48	0.19 / 0.19	Hämatologie	current	Rohlfing, Sarah	write access	1
17	Diagnostik Sonographie	Type A		★★★★★ (1)	0.95 / 0.95	0.05 / 0.05	Gastroenterologie	current	Roos, Katja	write access	2
18	Mallory-Weiss	Type A		★★★★★ (1)	0.99 / 0.99	0.20 / 0.20	Gastroenterologie	current	Roos, Katja	write access	1
19	DCMP Therapie	Type A		★★★★★ (1)	0.88 / 0.88	0.23 / 0.23	Kardiologie	current	Bekeredjian, Raffi	write access	2
20	Studentenfrage: HIT 2	Type A		★★★★★ (1)	0.99 / 0.99	0.08 / 0.08	Studentenfragen	current	Jünger, Jana	write access	10
21	Myokardinfarkt	Type A		★★★★★ (1)	0.55 / 0.55	0.01 / 0.01	Kardiologie	current	Bekeredjian, Raffi	write access	2
22	chron Hep B Therapie	Type A		★★★★★ (1)	0.71 / 0.71	0.18 / 0.18	Gastroenterologie	current	Roos, Katja	write access	2
23	Fettverbrennung	Type A		★★★★★ (1)	0.93 / 0.76	0.20 / 0.33	Sportmedizin	current	Schommer, Kai	write access	4
24	Diabetes Medikamente Sulfonylhar...	Type A		★★★★★ (1)	0.88 / 0.88	0.13 / 0.13	Endokrinologie	current	Rudofsky, Gottfried	write access	1
25	Bradykardie	Type A		★★★★★ (1)	0.95 / 0.93	0.04 / 0.12	Kardiologie	current	Bekeredjian, Raffi	write access	2
26	IgA-Nephritis	Type A		★★★★★ (1)	0.82 / 0.82	0.19 / 0.19	Nephrologie	current	Krautter, Markus	write access	1
27	CRAB-Kriterien	Type A		★★★★★ (1)	0.93 / 0.93	0.30 / 0.30	Hämatologie	current	Rohlfing, Sarah	write access	1

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Quality assurance: adaptive single or group review

★ Review: a77

Item Reviewer Review

Type: Single Question (Typ A) ☆☆☆☆

Author: Freeman, Adrian

A 28 year old male refugee from Africa presents with acute severe breathlessness. On examination he has oedema of both ankles. His JVP is elevated. His pulse is irregular and his blood pressure is 106/82 mmHg. His apex beat is tapping in nature. The first heart sound is loud, and there is a low pitched mid diastolic murmur heard best over the apex, with radiation to the axilla. He is given warfarin to prevent embolism from the heart.

Principles: Cardiovascular system
Processes & Tasks: Abnormal processes and mechanisms of disease
Item Id: 252411 | Entity ID: 194511
version: 1
Question Id: 283425
Guess probability: 20.00%

What cardiac structure would be the most likely source of embolism?

(A) Left atrium
(B) Left ventricle
(C) Mitral valve vegetation
(D) Right atrium
(E) Right ventricle

Review

Unterschiedlich lange Antworten

formal review

format is correct (*k.o.*):

no clues in answer alternatives / no cueing (*k.o.*):

question is answerable without the answer alternatives:

answer alternatives are homogenous:

content review

correct classification:

correct in respect of content (*k.o.*):

difficulty of the question is appropriate for the target group:

correct use of patient vignette:

question is plausible and understandable (*k.o.*):

answer alternatives are plausible and understandable (*k.o.*):

explanation

add explanation

U C A N

Save

Integrated tools



Desktop examinations



Examination via tablets (MC, OSCE, oral)



Document-reader-system

Examinator² for quality assurance: analysis & grading

Headline: Part I: written European ORL-HNS exam

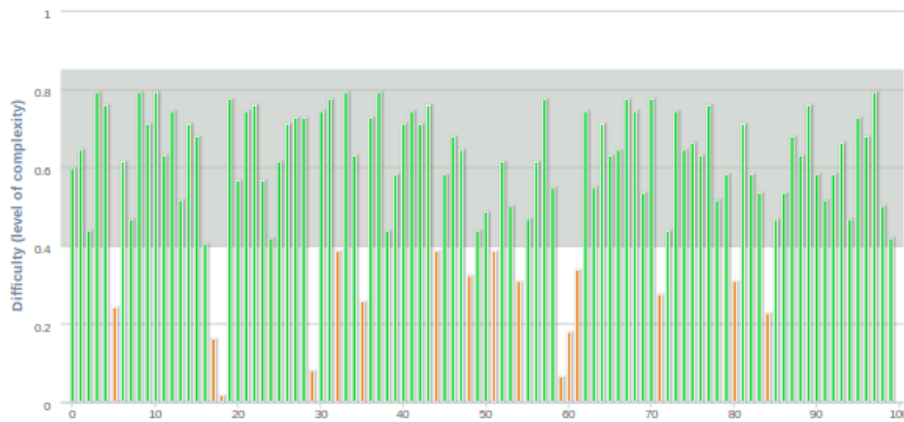
Second headline: No headline available

Author:

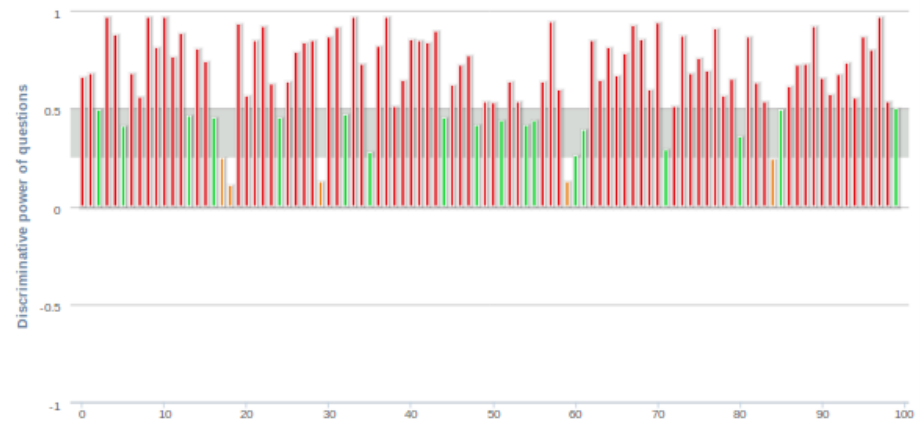
Introduction: No introduction available

Short report: The examination MCQ for Nizza 2013 written on 4/27/13 contains 100 question, with a maximal point count of 100.0. The average point count is 57.4 (Max. 88.0, Min. 0.0, standard deviation 30.88). The average grade is 3.6 (Max. 5.0, Min. 2.0, standard deviation 1.11). The passing threshold of 60.0 has been calculated by the rule 60 Prozent. Cronbachs Alpha for this examination is 0.99. From the 62 candidates, who has been evaluated with the rule 60 Prozent has 42 (67.74%) passed the examination, 20 (32.26%) had not enough points to pass.

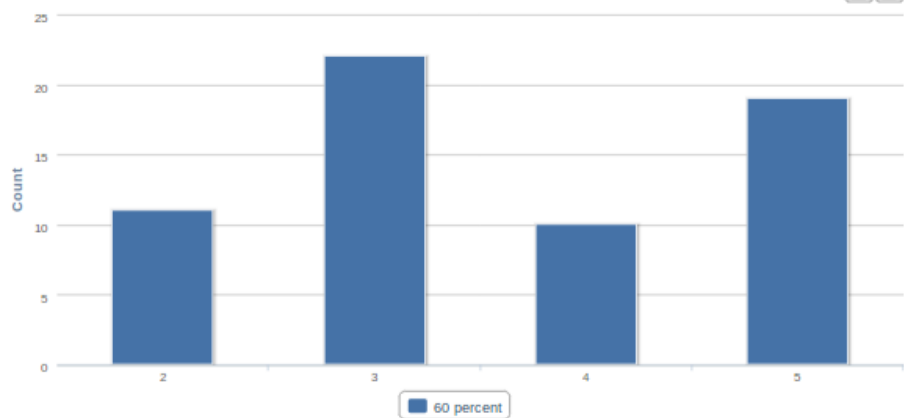
Difficulty (level of complexity)



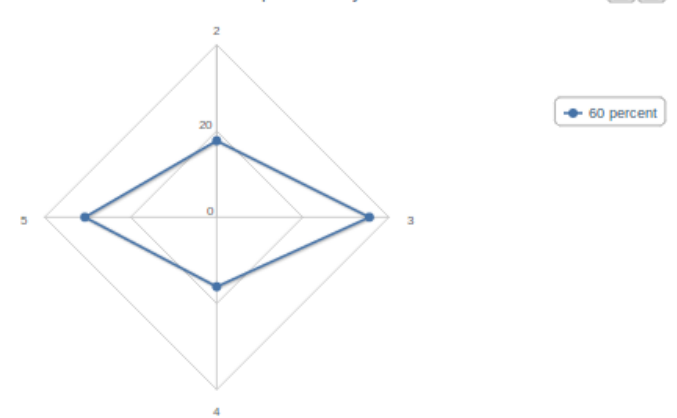
Discriminative power of questions



Grade Distribution Total



Grade Distribution Proportionately



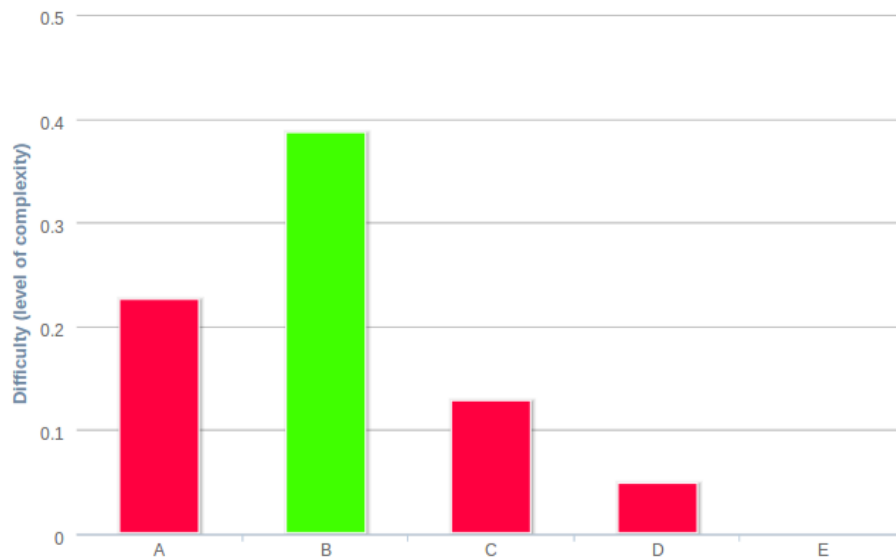
Quality assurance: Examiner² detail view of an item

Type: Type A
Author: Albegger, Klaus

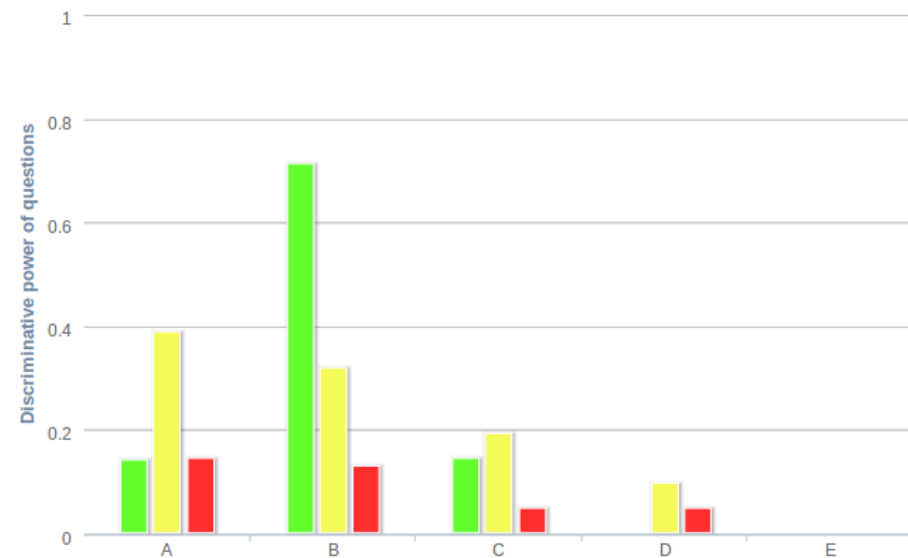
Which class of drugs has xerostomia as a recognised side-effect?

- (A) H2 (histamine) blockers (1)
(B) Antidepressants (1)
(C) Alpha-blockers (1)
(D) ACE (angiotensin-converting enzyme) inhibitors (1)
(E) NSAID (non steroidal anti-inflammatory drugs) (1)

Difficulty (level of complexity)



Discriminative power of questions



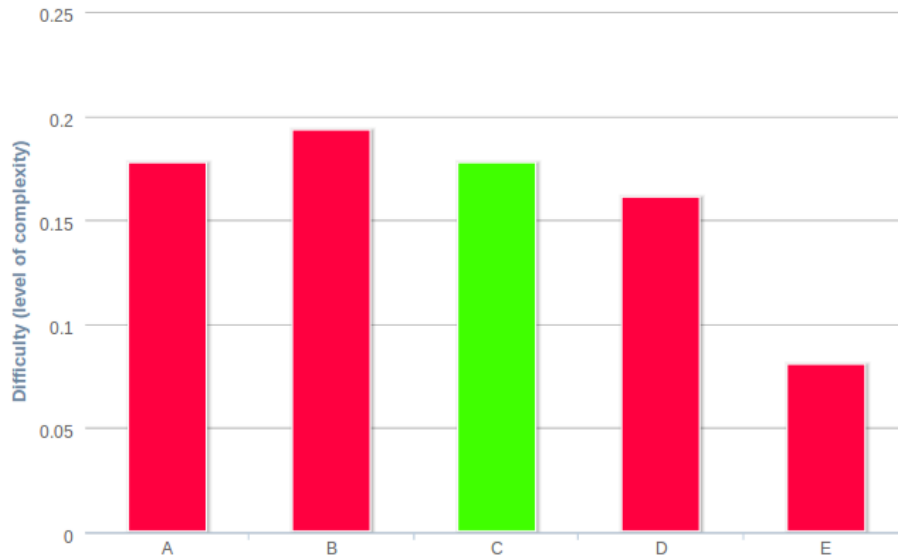
Quality assurance: Examiner² detail view of an item

Type: Type A
Author: Albegger, Klaus

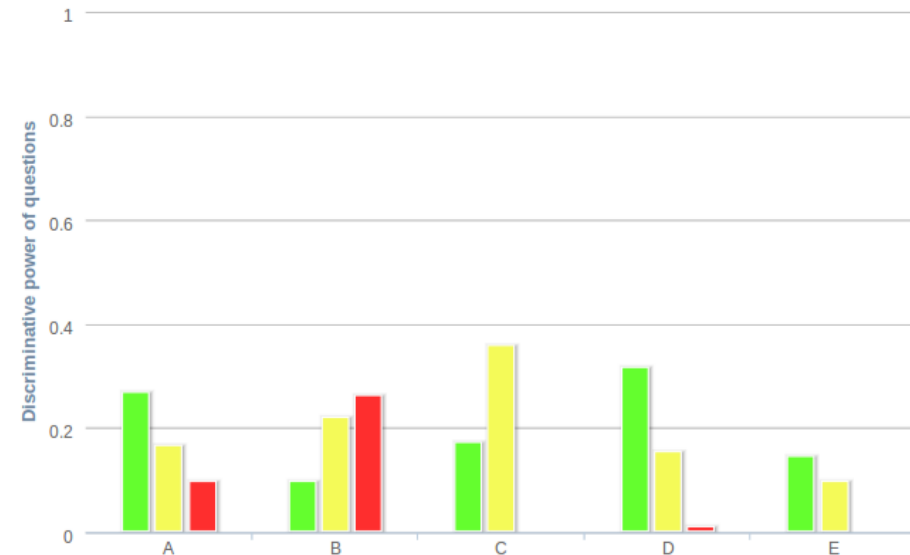
A 47-year old patient presents with nasal obstruction, facial pain and nasal discharge. Your clinical diagnosis is acute rhinosinusitis. What would be the strongest argument for you to prescribe antibiotics?

- (A) Duration of symptoms for more than 3 days (1)
- (B) Recurrent episodes of rhinosinusitis in past medical history (1)
- (C) Coexisting chronic obstructive pulmonary disease (1)
- (D) Discharge only from one side of the nostril (1)
- (E) Associated loss of smell (1)

Difficulty (level of complexity)



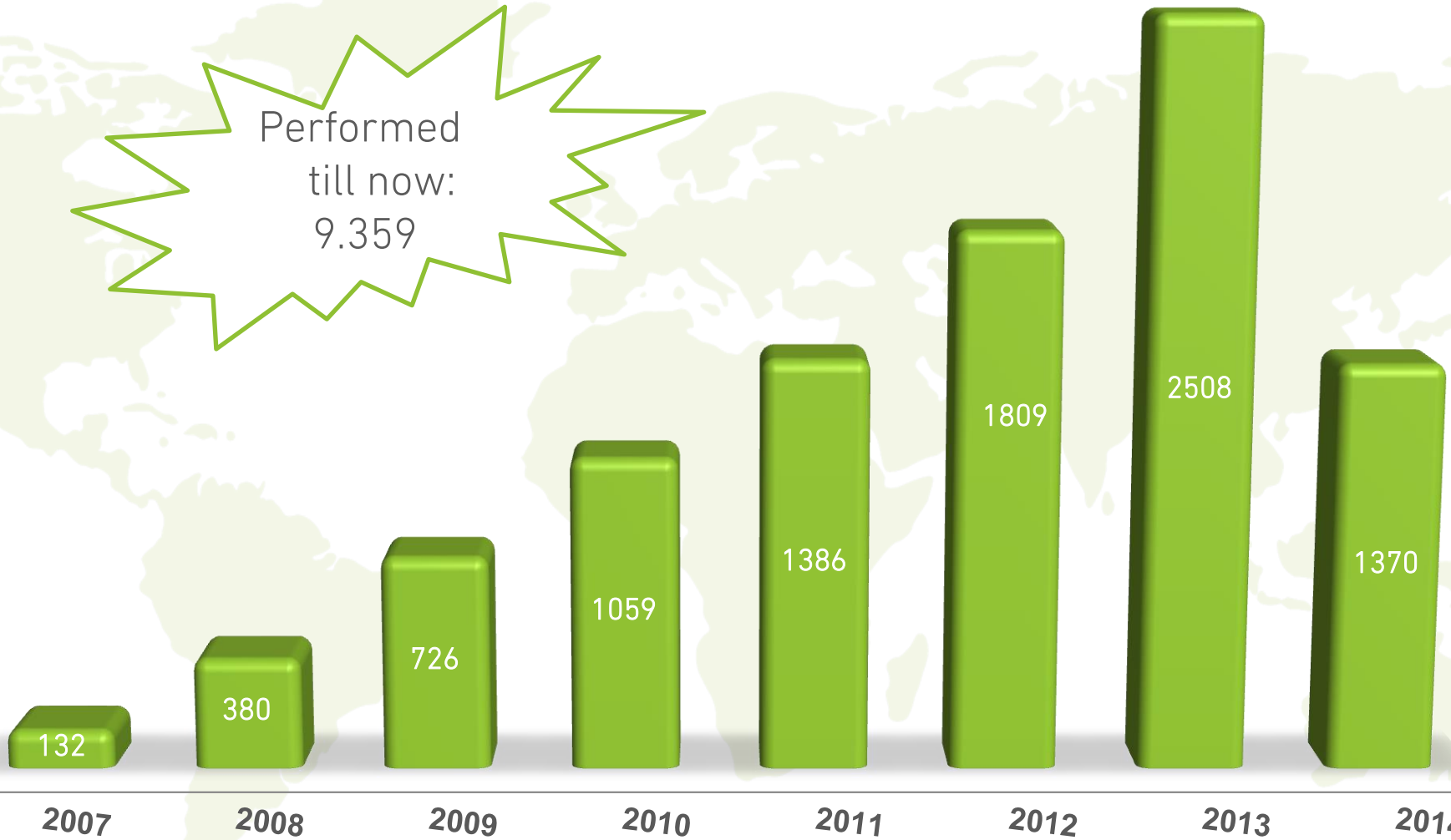
Discriminative power of questions



UCAN: stored questions per year



UCAN: performed examinations per year



(approx. 2,000,000 examinees)



European Boards: performed exams

- ◆ 07.04.2013 EBE-ORL: Written exam in Nizza, **50** examinees
- ◆ 07.10.2013 EBE-ORL: Written exam in Vienna, **41** examinees
- ◆ 15.11.2013 ESICM: Oral exam in 7 countries, **234** examinees
- ◆ 11.04.2014 EBE-ORL: Written exam in Antalya, **123** examinees
- ◆ 06.05.2014 ESICM: Oral exam **with tablets** in London, Copenhagen, Vienna, Prague, Amsterdam, Barcelona, Zurich , **214** examinees



