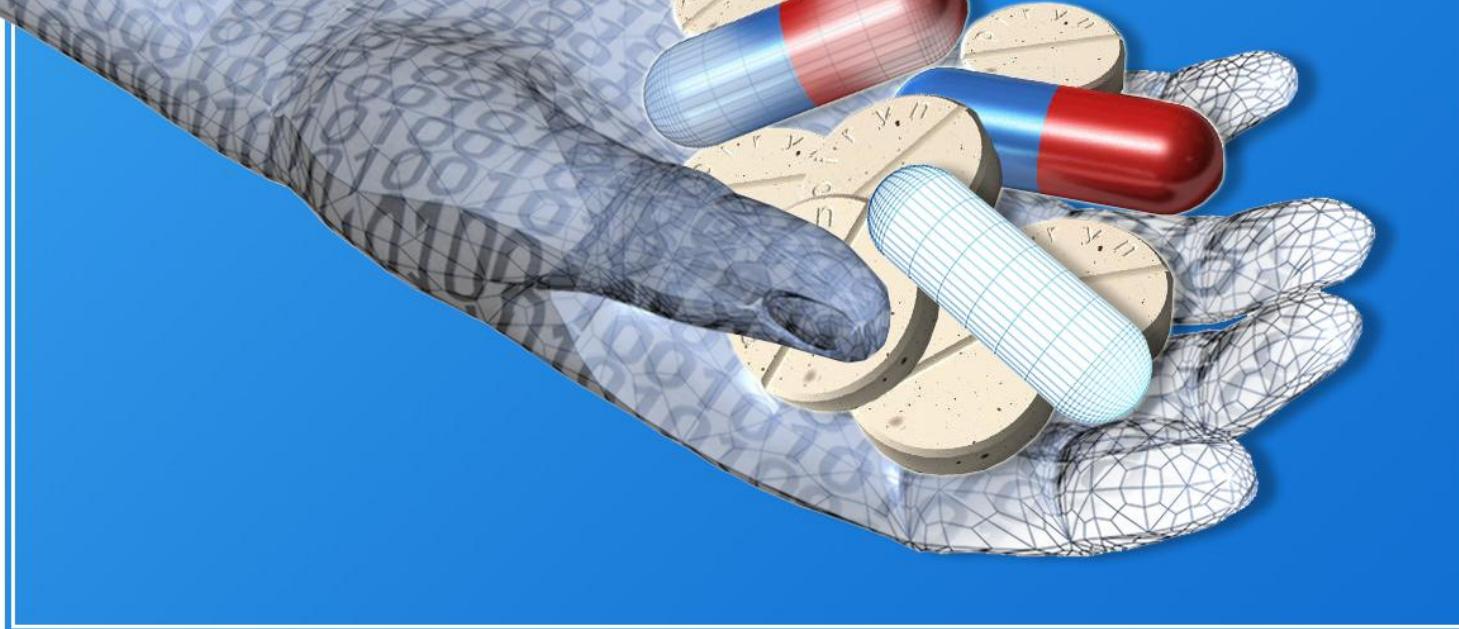


Zweitverwertung klinischer Daten

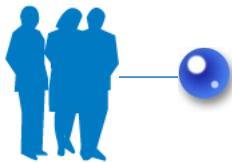


Pr Christian Lovis, MD MPH
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ÖSTERREICHS EHEALTH EVENT | WIEN | 23. – 24. MAI 2013





Stilboestrol in complicated pregnancy

Pregnancy Complicating Diabetes*

PRISCILLA WHITE, M.D.
Boston, Massachusetts

DURING the past fifteen years a study has been made at the George F. Baker Clinic of the New England Deaconess Hospital to determine possible causes and the means to prevent the high fetal wastage in diabetic pregnancies. The following report is a summary of the experiences with 439 viable diabetic pregnancy cases in which assays for one or more of the sex hormones of pregnancy were determined. Viability in the infant was defined by weight, namely, in excess of 960 Gm. This series of 439 includes all consecutive cases under personal observation. Excluded from the report are consultation cases treated elsewhere and patients reporting to the clinic for delivery but arriving too late for significant studies for sex hormone excretion.

The series appears to be unique because it is characterized by the number of primiparae, the number of patients in whom the onset of diabetes occurred in childhood and youth and those in whom the duration of diabetes is long. Primiparae numbered 57 per cent of the series. The onset of diabetes had occurred under the age of twenty years in more than half (58 per cent) and the duration was long, exceeding ten years in 50 per cent.

Although maternal mortality was low, for there was only one death or a case mortality of 0.2 per cent, fetal fatalities numbered 78, or 18 per cent. The maternal death was technically so classified only. It occurred fifty days after delivery and was proved by autopsy to be due to infectious hepatitis. These vital statistics as well as those reported elsewhere indicate that fetal not maternal survival constitutes the problem when pregnancy complicates diabetes.

* From the George F. Baker Clinic, New England Deaconess Hospital, Boston, Mass.

Abnormalities in the obstetric course were common and included eclampsia four times (1 per cent); an additional seventy-six patients (17 per cent) had hypertension and albuminuria; eighty (18 per cent) had hypertension alone and thirty-four (8 per cent) albuminuria alone. Nearly one-half the number thus had evidence of hypertensive disorders or renal disease. Placenta previa occurred once; premature rupture of membranes before the twentieth week with continuous loss of amniotic fluid for weeks and months occurred four times. Two other deviations from normal obstetric courses were frequently seen, namely, irritability of the uterus and hydramnios. These complications occurred in varying degrees in nearly all patients.

Diabetic crises, on the other hand, were infrequent. Coma, defined as a lowering of the CO₂ content of the blood to 9 m.Eq., occurred in eight patients only, or 2 per cent, and hypoglycemia of severity in four, or 1 per cent.

The fetal fatalities are summarized in Table I. Of the seventy-eight fetal deaths, thirty-four were stillbirths and forty-four occurred in the early neonatal period. From Table I it appears that fetal fatalities have been influenced in varying degrees by (1) poor control of maternal diabetes, (2) the occurrence of congenital fetal defects, (3) the degree of maternal vascular disease, (4) prematurity, (5) duration of diabetes, (6) its age of inception and (7) the imbalance of the sex hormones of pregnancy.

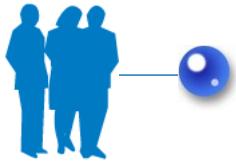
Diabetic coma which may be taken as the measure of the maximum degree of poor control of diabetes coincided with 5 per cent of the fetal fatalities. Indeed, only two infants in this series survived a bout of dia-



TABLE IV
SEX HORMONAL THERAPY IN MG. OF STILBESTROL AND PROLUTON ACCORDING TO WEEKLY PREGNANCY AND CLINICAL CLASSIFICATION

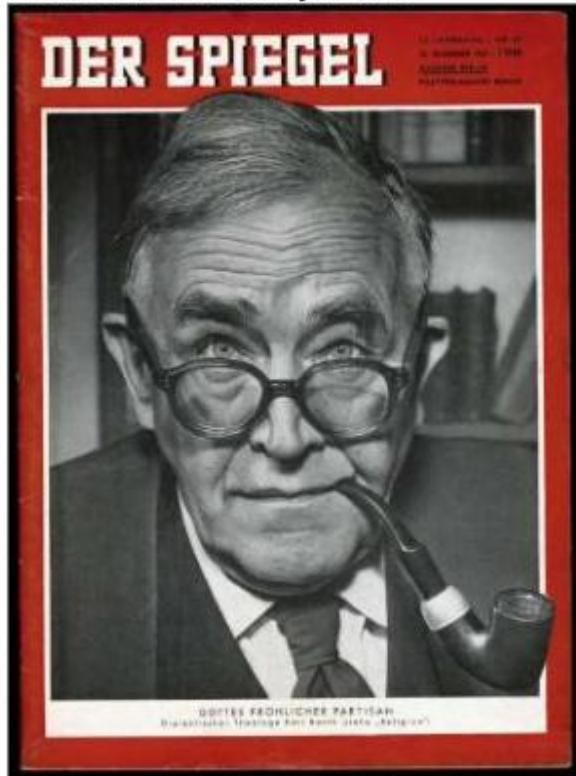
Week of Pregnancy	Stilboestrol and Proluton in mg. According to Class			
	A	B and C	D	E and F
6-19	0	5	10	25
20-23	0	10	15	50
24-27	0	15	25	75
28-31	0	25	50	100
32 and up	0	50	75	125

Am J Med. 1949 Nov;7(5):609-16.



Let's start with a true story

DER SPIEGEL 52/1959



durch geschicktes Taktieren die antikatholischen Vorurteile vieler Amerikaner zu umgehen. Er schwor tapfer auf den Grundsatz der Trennung von Staat und Kirche; er ließ durchblicken, daß er sich notfalls auch gegen die katholische Kirche wenden werde, falls Gewissen oder amtliche Pflicht ihn dies abverlangten.

Schon schien Kennedy gegen alle antikatholischen Erwartungen immun zu sein. Am Anfang des Jahres 200 katholische Kardinäle, Erzbischöfe und Bischöfe eine Aktion, die Kennedys Siegeschancen ruinieren sollte, und Amerika einen innenpolitisch überaus gefährlichen Wahlläger be scherten könnte.

Anlaß des klerikalen Vorstoßes war der Bericht eines Sonderkommissionärs, Bankier-General William George, die im Sommer dieses Jahres für Präsident Eisenhower Probleme der amerikanischen Auslandshilfe untersucht hatte. Der Draper-Kommission in New York empfohlen, Amerika müsse hilfsuchende Länder durch „die Formulierung praktischer Programms unterstützen, die eigentlich die Menschen vom Bevölkerungsdruck zu befreien“.

Krieg mit dem torpedierten US-Zerstörer „Dorchester“ untergegangen waren, nachdem sie ihre Schwimmwesten an die Mannschaft abgetreten hatten.

Der katholische Klerus aber lehnte sofort auf die überkonfessionelle Memorial-Kampagne des vize-Kapitans ein und unterstützte Seine Opposition war so hart, daß er — wie Baptist Poling nun enthüllte — den Senator Kennedy unter Druck setzte, der angeblich als einer der am meisten katholischer Politiker eine große Rede auf der vorgesehenen Kundgebung in Philadelphia zu halten. Kennedy sagte daraufhin seine Teilnahme ab.

Folgerte Daniel Poling: Schon einmal beanspruchte also die Kirche Autorität über Kennedy und übte sie aus, als er ein hohes öffentliches Amt bekleidete. Mindestens in

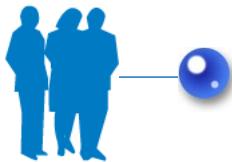
LEBENSMITTEL
Gefährliches Geflügel

A ls sich die amerikanische Nation im vergangenen Monat anschickte, den Feiertag des „Thanksgiving“ mit dem traditionellen Verzehr von Preiselbeeren zu krönen, schwächte Gesundheitsminister Arthur Flemming den Appell seiner Landsleute mit einer beobrunzten Verlängerung: Es bestünde kein Bedarf der Preiselbeer-Ernte war mit einem Unkrautvernichtungsmittel verseudt, das die staatlichen Lebensmittelüberwacher als gefährlich erachteten.

„Über Nacht“, meldete das Nachrichtenmagazin „Newsweek“, „wurde jede Preiselbeeren im Lande verboten“. Die Superwarenhändler entfernten die Preiselbeer-Konserven aus ihren Regalen, hysterische Konsumenten ersuchten die Behörden um Auskunft, was sie denn nun überhaupt mit dem „Unkrautvernichtungsmittel“ meinten. Der Hersteller, ein kleiner Molkereibetrieb aus dem Südwürttembergischen Ulm, gab zu Protokoll:

Die Lebensmittelüberwacher hatten das Mittel erst 1947 für die Tierzucht freigegeben, nachdem zweijährige Untersuchungen es als sicher erscheinen ließen, daß keine Hormon-Reste in den Tierkörpern zurückbleiben. Während auch bei späteren Kontrollen keine Stilbestrol-Spuren in Hammel- oder Rindfleisch entdeckt wurden, konnten die Wissenschaftler jedoch kürzlich bei Geflügel Hormon-Rückstände nachweisen. Sie fanden Stilbestrol in den Nieren, der Leber und der Haut der Tiere.

Freilich würde ein Mensch nur den Bruchteil eines Milligramms Stilbestrol zu sich nehmen, äße er beispielsweise einen ganzen Kapaun samt Haut, Leber und Nieren. Demgegenüber verordnen amerikanische Ärzte ihren Patienten zuweilen Dosen von 15 Milligramm der Hormonsubstanz, manchmal sogar von 125 Milligramm täglich. Nach besonders langwierigen Behandlungen kam es "in ganz seltenen Fällen" (so das Nationale Krebsforschungs-Institut) zu Krebserkrankungen, doch ist umstritten, ob die Hormon-Injektionen tatsächlich die Ursache waren



Stilboestrol

1: [N Engl J Med. 1971 Apr 15;284\(15\):878-81.](#)

Comment in:
[Obstet Gynecol. 2003 Aug;102\(2\):222.](#)

1971

Adenocarcinoma of the vagina. Association of maternal stilbestrol therapy with tumor appearance in young women.

[Herbst AL](#), [Ulfelder H](#), [Poskanzer DC](#).

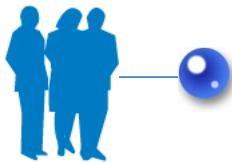
1: [Br Med J. 1978 Jun 17;1\(6127\):1509-00](#)

Stilboestrol and vaginal clear-cell adenocarcinoma syndrome.

1978

[Monaghan JM](#), [Sirisena LA](#).

A vaginal clear-cell adenocarcinoma developed in a young woman who had been exposed in utero to maternal stilboestrol treatment. During 1940-71 in the UK some 7500 women were given stilboestrol during pregnancy. Thus more cases are likely to appear and clinicians caring for young women should be alert to this possibility.



Mise au point sur le diéthylstilbestrol (D.E.S.) (Distilbène®, Stilboestrol-Borne®) et le risque de complications génitales et obstétricales

mise à jour : janvier 2003

Le diéthylstilbestrol (D.E.S), oestrogène de synthèse non stéroïdien a été utilisé en France entre 1948 et 1977 chez les femmes enceintes pour prévenir les avortements spontanés et les hémorragies gravidiques. Il a été commercialisé en France à partir de 1948 sous les noms de spécialités Distilbène®, Stilboestrol-Borne®.

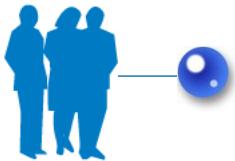
C'est aux USA en 1971 que les premiers cas de cancers du vagin chez des jeunes filles qui avaient été exposées *in utero* au D.E.S. ont attiré l'attention. Un des premiers cas français d'adénocarcinome vaginal chez une jeune fille a été publié en 1975. En France, l'indication "avortements spontanés à répétition" a été supprimée en 1976 et la contre-indication d'utilisation chez la femme enceinte a été ajoutée en 1977.

Depuis, d'autres complications génitales et obstétricales de l'exposition au D.E.S. pendant la grossesse ont été observées chez les enfants exposés *in utero* et ont fait l'objet d'informations successives, notamment par la diffusion de brochures informatives destinées aux professionnels de santé puis au public.

Ce problème reste d'actualité et ce probablement pour plusieurs années encore. En effet, entre les années 1948 et 1976, environ 200 000 femmes ont été traitées par D.E.S. pendant leur grossesse en France. En tenant compte des avortements et de la mortalité foetale et néonatale, le nombre d'enfants nés de ces grossesses est estimé à 160 000 (soit 80 000 filles et 80 000 garçons exposés *in utero*). Le pic de prescription est situé à la fin des années 1960 et au début des années 1970. Les patients exposés *in utero* ont donc aujourd'hui un âge compris entre 25 ans et 52 ans. Les effets sur la 2ème génération en terme de conséquences obstétricales pourront donc être observés jusqu'en 2015.

A ce jour il apparaît que seule une partie du corps médical connaît les conséquences de l'exposition *in utero* au D.E.S. C'est pourquoi l'Agence Française de Sécurité Sanitaire des Produits de Santé (Afssaps) a décidé d'informer les professionnels de santé sur les modalités de dépistage et de prise en charge de ces patients. Cette mise au point a été préparée avec la coopération de l'Association Réseau D.E.S. France.

Actuellement le diéthylstilbestrol reste commercialisé sous le nom de Distilbène® dans l'indication de certaines pathologies prostatiques, uniquement.



And the story is not finished

[Epidemiology](#). 2013 May;24(3):430-8. doi: 10.1097/EDE.0b013e318289bdf7.

Medical conditions among adult offspring prenatally exposed to diethylstilbestrol.

Troisi R, Hyer M, Hatch EE, Titus-Ernstoff L, Palmer JR, Stickerlitter WC, Herbst AL, Adam E, Hoover RN.

Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Department of Health and Human Services, Bethesda, MD, USA. troisir@mail.nih.gov

2013

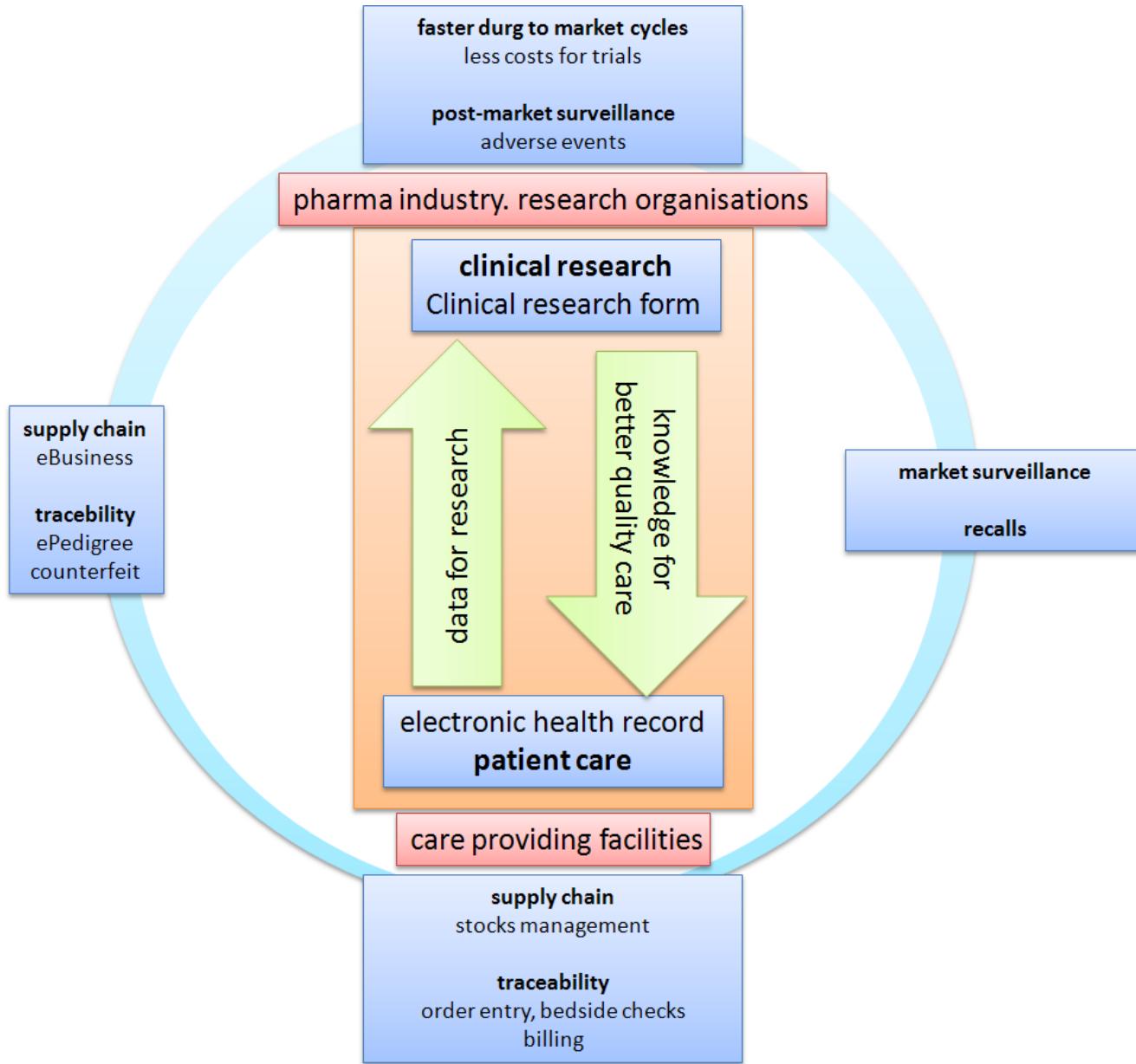
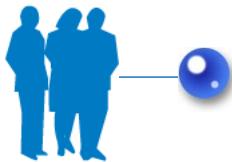
hazard ratios were :

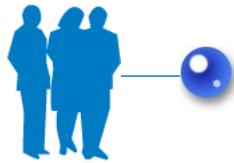
- 1.21 (0.96-1.54) for diabetes,**
- 1.27 (1.00-1.62) for all cardiovascular disease,**
- 1.18 (0.88-1.59) for coronary artery disease,**
- 1.28 (0.88-1.86) for myocardial infarction,**
- 1.12 (1.02-1.22) for high cholesterol,**
- 1.14 (1.02-1.28) for hypertension,**
- 1.24 (0.99-1.54) for osteoporosis,**
- 1.30 (0.95-1.79) for fractures.**



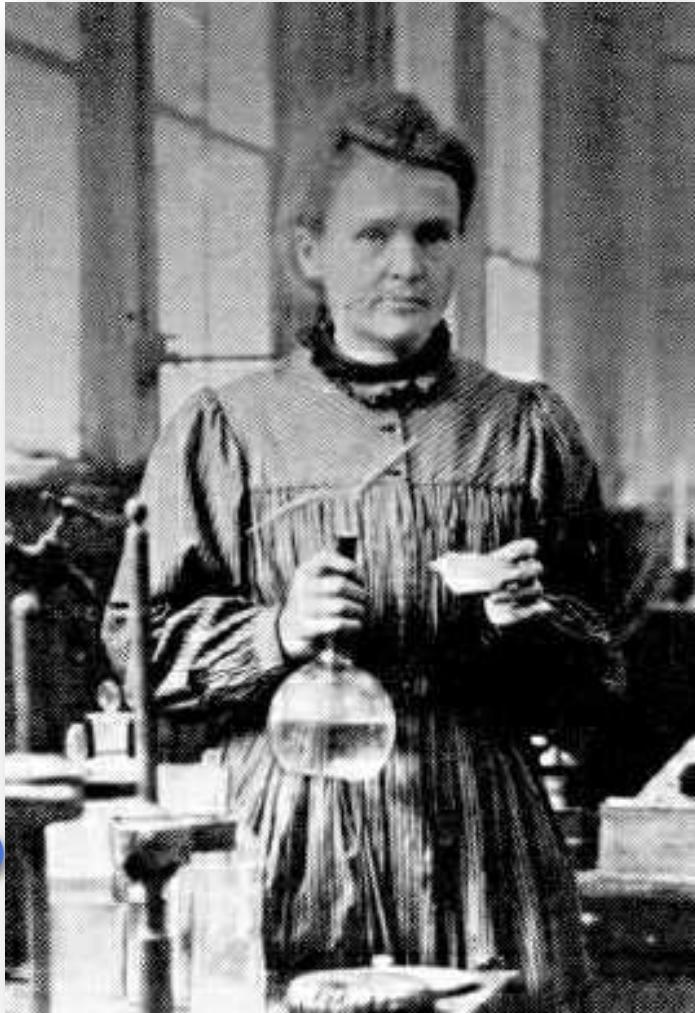
Plenty of good reasons to re-use information

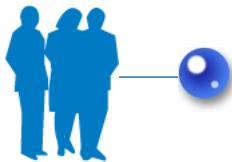
- Management, decision makers
- Public health, emerging diseases, ...
- Post market surveillance, pharmaco-vigilance, ...
- Biosurveillance
- Clinical research, from feasibility to eCRF's
- Rare diseases
- Personalized medicine
- ...





A long evolution around information





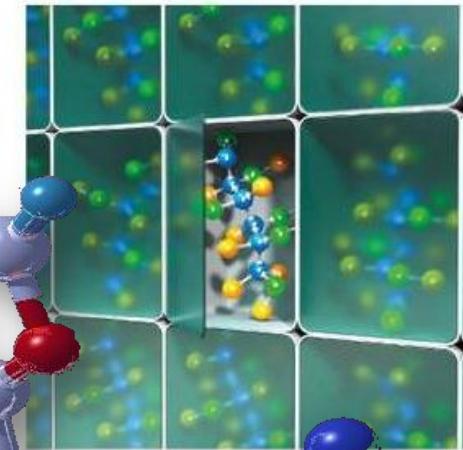
Covering all life science knowledge



RSC Drug Discovery

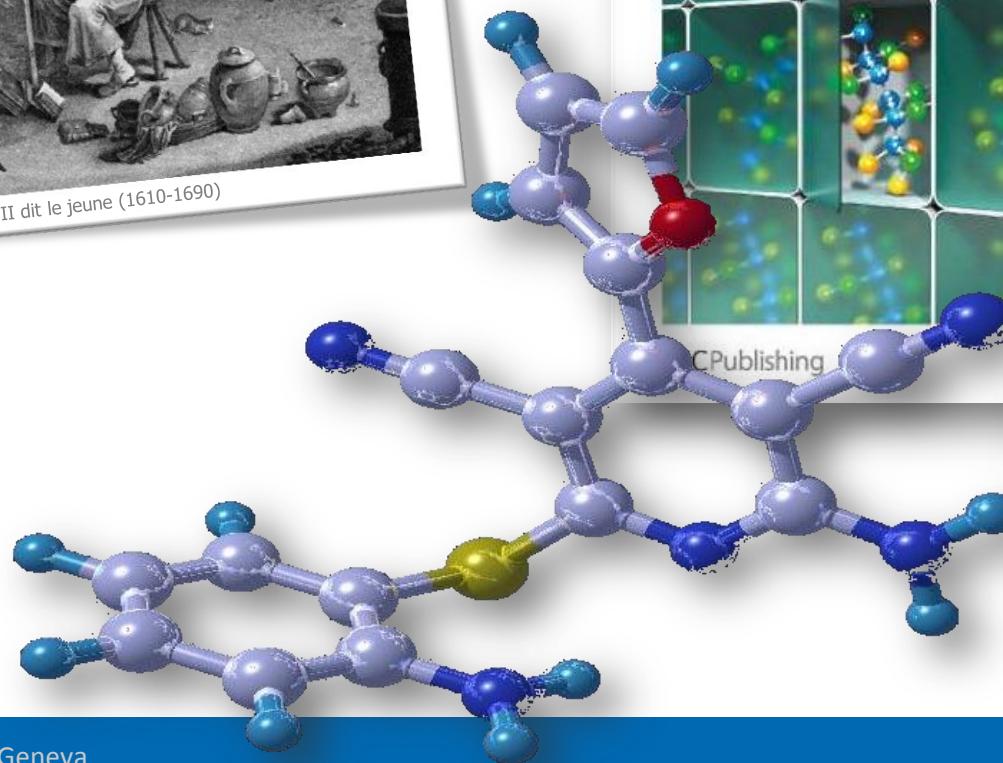
Edited by F. Javier Luque and Xavier Barril

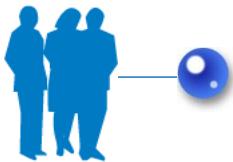
Physico-Chemical and Computational Approaches to Drug Discovery



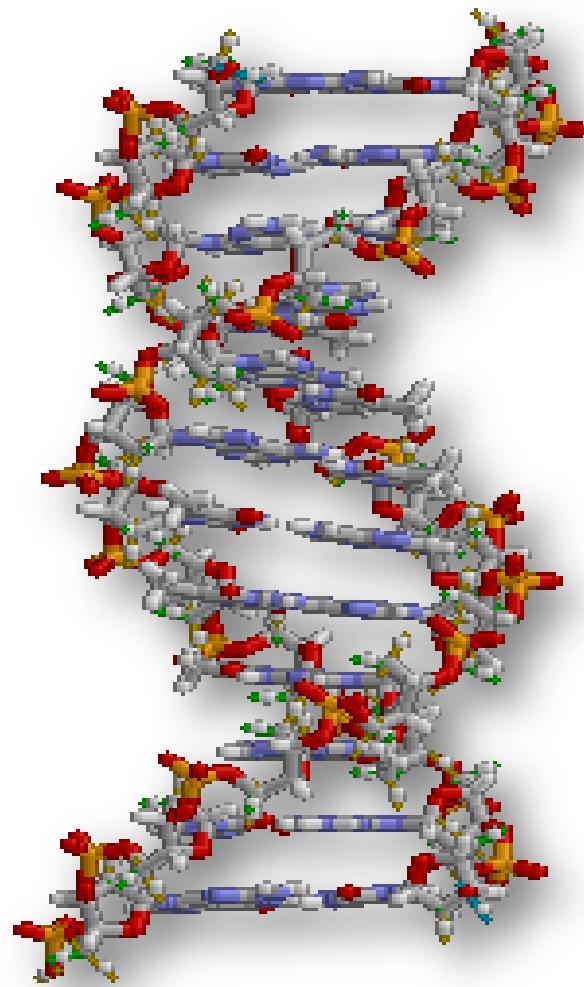
CPublishing

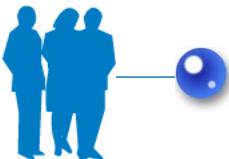
Javier Luque (Editor), Xavier Barril
(Editor)
ISBN: 978-1-84973-353-3
Copyright: 2012





From population to individuals





and all this since ... >3'000 years



Un papyrus médical égyptien du Nouvel Empire (1550-1050 av J.C.), véritable "manuel de médecine", au du musée du Louvre (Belga)

Véritable "livre de médecine" le document possède la rare particularité de comporter sur ses deux faces des textes relatifs à un même sujet. Ecrit de façon continue par deux scribes différents, il est rédigé en cursive hiéroglyphique, le hiératique, dans une écriture caractéristique du Nouvel Empire

Au recto, le premier scribe a recopié un recueil de diagnostics et de recettes médicales.

Au verso, les descriptifs sont accompagnés de textes qui transposent la maladie dans un contexte divin où elle trouvait explication et remède.

Cette oeuvre, antérieure de 12 siècles aux écoles de médecine grecques, constitue un document essentiel pour l'histoire de la pensée médicale et de la pharmacie. Par ses dimensions, par le nombre et la longueur de ses textes, ce papyrus peut être considéré comme le deuxième au monde, après celui conservé à la bibliothèque de l'université de Leipzig en Allemagne. (GFR)





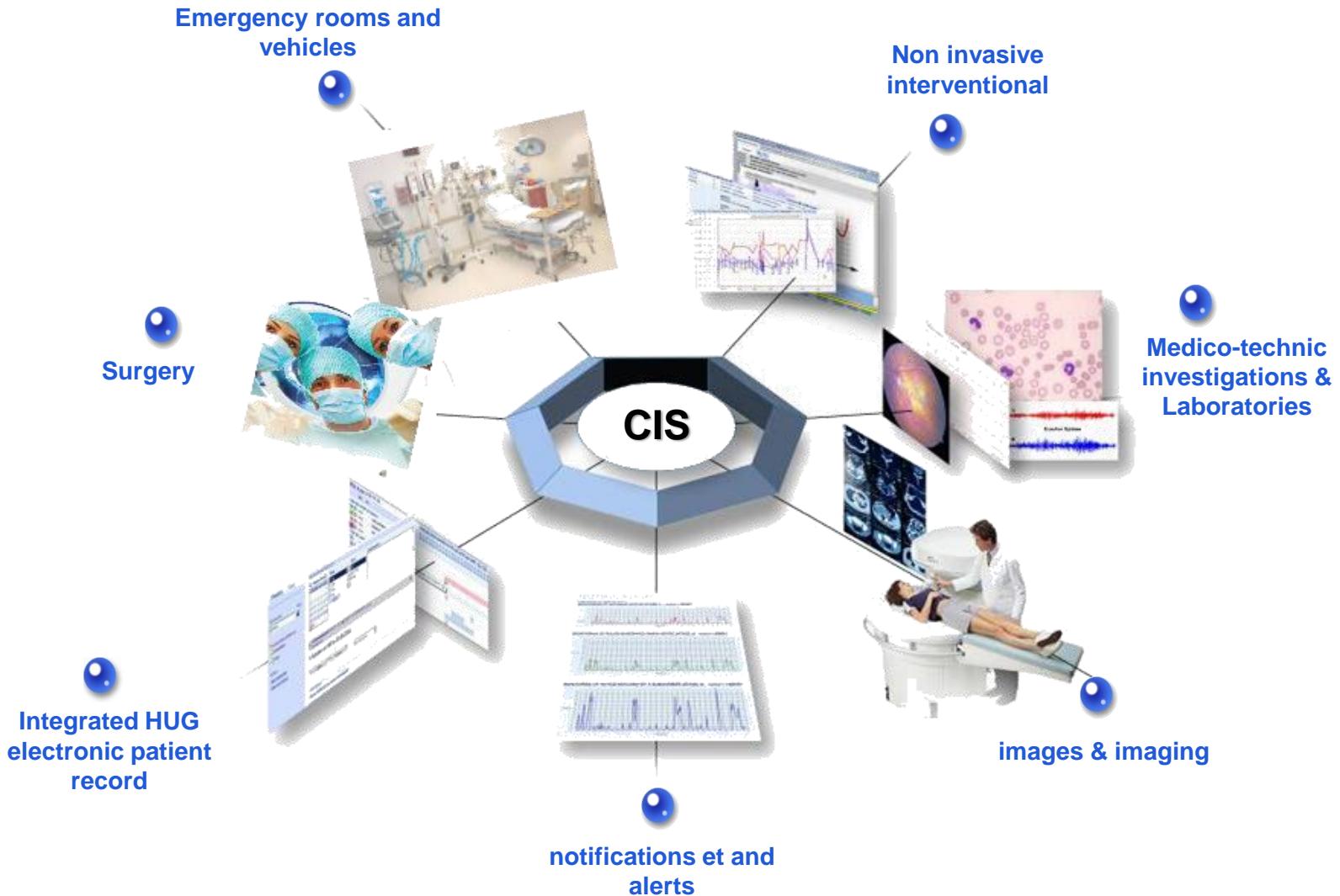
Meaning

- interoperability
- integration
- semantics
- Business processes





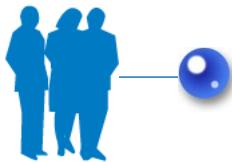
Integration & interoperability





Paperless ?





Paperless !

(or08) Ormed 08 Banque de Développement v2012.10beta1

DOMPIERRE DUMBLEDORE Albert,Magnus (né le 04/05/1956, 56 ans, M)

Allergie Patient : 97005400 EdS N° 97013235 SRV-SU - 24-3C-US - 80-D224 Méd. / Urgence Non enrôlé dans Etoile

Cockpit infirmier du service Urgences Principal Réanimation

Dernière mise à jour 09:52:16 Mettre à jour

Médecin cadre Perrier Arnaud Patient pris en charge par à 09:52
Médecin référent Martin Pierre-Yves
Infirmier référent Leriche Jeanine

EDS 07/02/2011 00:01 Service des urgences (24 - 3 Chêne, 628... Filtrer suivant mon rôle

Vue graphique 24/10/2012 11:00 26/10 09:52 48 heure(s) 11:00 17:00 23:00 05:00 11:00 17:00 23:00 05:00 11:00

Ordres à relever

Ordres à relever en urgence 31 prescription(s)
Autre Voie 1 prescription(s)
2x/j débuter de suite
ECG 2 prescription(s)
Type : ECG Standard (12 dérivations) 1x/j débuter de suite
ECG Type : ECG Standard (12 dérivations), Dérivations périphériques (I, II, III)
Labo 1 prescription(s)

Equipements

Médicaments

Canule v. Canule v.

Allergies Nouvelle allergie
Banane
Kiwi
Poire
Litchi
insuline asparte 2010 Tout 172

Alertes et précautions CONTACT PROTECTION STRICT
Alerte BMR (0) Aucune alerte signalée.
Autre alerte (0) Aucune alerte signalée.

Transmission ciblée Alimentation - Hydratation / Alimentation déficiente
Le poids du patient est trop faible surveiller son alimentation faible hausse significative
Augmenter son alimentation du midi difficilement quantifiable

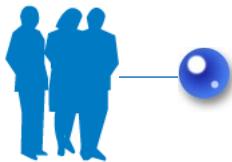
Circulation - Cardiovasculaire / Débit cardiaque diminué rythme anormal Repos, au lit rythme plus stable, mais il faudra encore attendre avant de confirmer ce point
marche Ras
course Impossi...

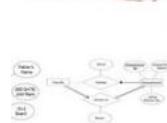
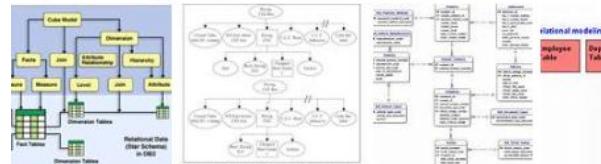
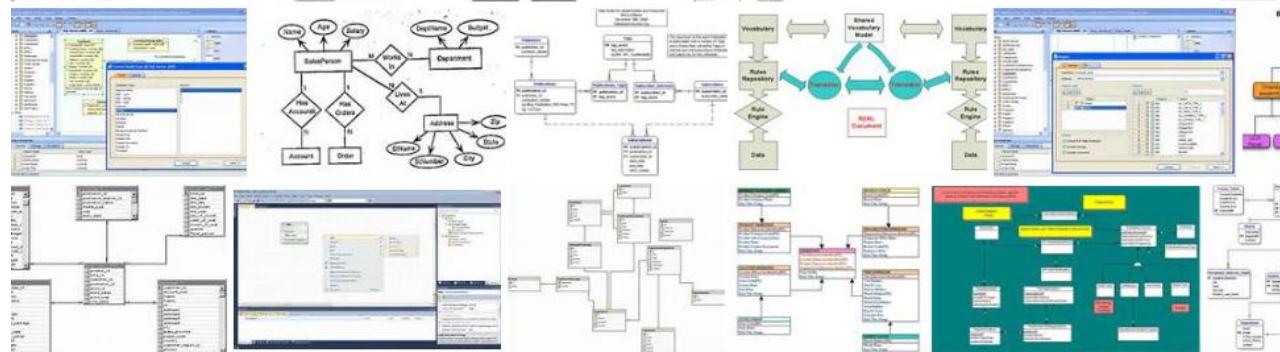
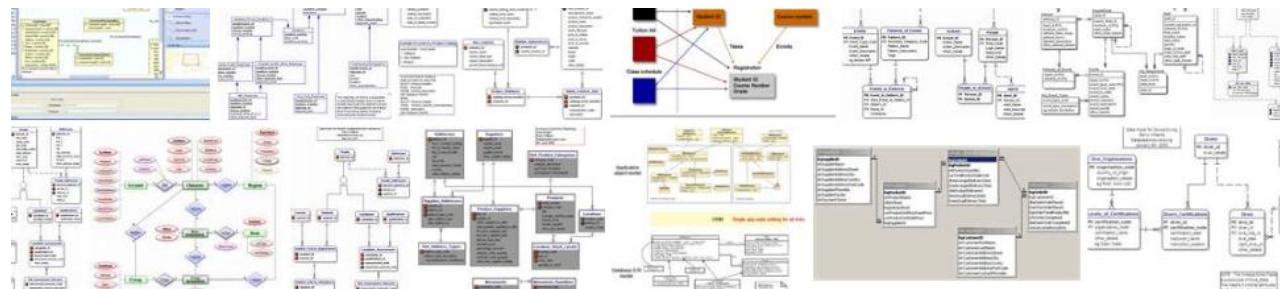
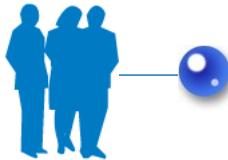
Protocoles

Il n'existe aucun protocole recommandé pour ce motif d'entrée du patient. Vous pouvez néanmoins consulter la liste de tous les protocoles en cliquant sur l'onglet 'Tous'.

Com DPA Pdg PP R C P P2 Nds F EIC Lab Doc Img RD EC EC2 DI RAO E VCS TC SV AD PV

DPI / Choix automatique du rôle Ma page d'accueil Mes accès récents DOMPIERRE DUMBLEDORE Albert,Magnus POUSSIN Jaune (102 ans, M) DOSSIER Bebe (2 ans et 8 mois, M) PAILLASSE Martine (35 ans, F) COCKPIT Conrad (32 ans, M) PRESO Vue (12 ans et 9 mois, M) Recherche patients Mes applications Accueil SU - Triage Addictologie Base médicamenteuse BIPO - Bilan préopératoire Contrôle des accès DebugIT statistiques antibiotiques Dossier Patient Administratif DPI Visa Documents à signer Etudes cliniques Editeur de protocoles Gestion des nomenclatures Gestionnaire de tâches Indicateurs opérationnels du SU Indicateurs opérationnels de neurologie Mes insertions automatiques dans les ... MOCA Ordres à relever Panorama SU Panorama SAUP Paramétrisation des documents Mes listes personnelles Mes listes personnelles d'unités Listes par zones d'activité médicale Listes par zones d'activité de soins Listes par droit d'accès Suivi de la documentation clinique







All is about «Bedeutung»

- Semantics carries meanings
- Models organize meanings
- Toivotan teille Tervetuloa
- Ich wünsche Ihnen Willkommen
- あなたを歓迎します。
- کاش شما خوش آمدید



Good model, bad semantics

- hôpital
 - OBX| 1| NM| XY32^Serum Na^L999| 1| 138| mmol/L|
- laboratoire
 - OBX| 1| NM| L3507^Na. SERM^L3573| 1| 6| UI|
- cabinet medical
 - OBX| 1| NM| NAS^Ser Sodium^L357| 1| 20| gr/l|





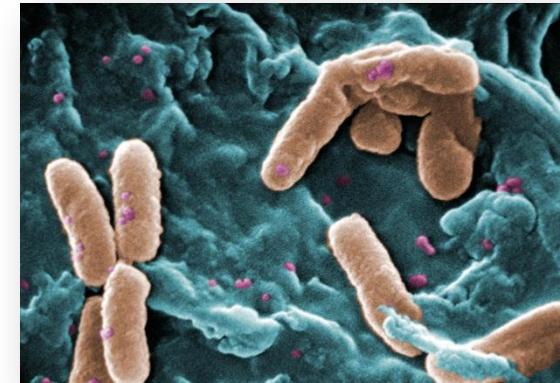
Model organizing common meanings

- hôpital
 - OBX| 1| NM| 2951-2^Serum Na^LN| 1| 138| mmol/L|
- laboratoire
 - OBX| 1| NM| 2951-2^Serum Na^LN | 1| 138| mmol/L|
- cabinet médical
 - OBX| 1| NM| 2951-2^Serum Na^LN | 1| 138| mmol/L|





Example - bacteriology

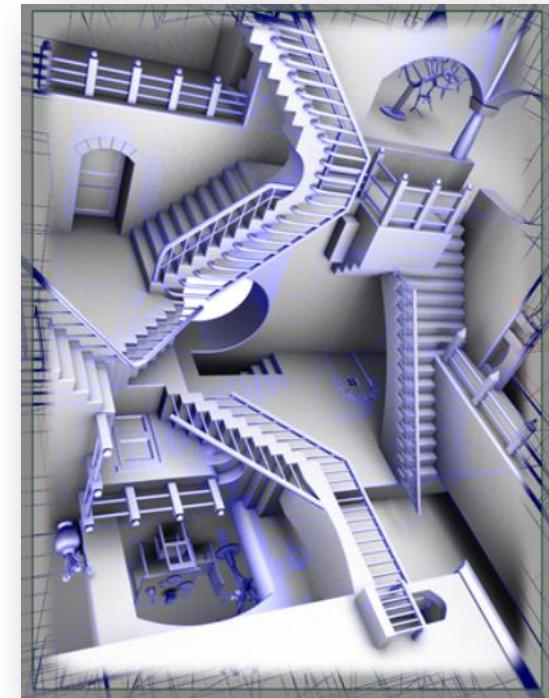


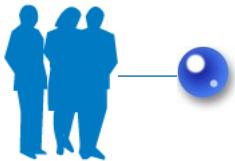
Type	Terminology	Reusability	State
Date	Time.OWL	With limited adaptations	100%
Pathogen identified by antibiogram	NEWT	Yes	97%
Pathogen identified by culture	NEWT	With limited adaptations	32%
Antibiotic	WHO-ATC	Yes	98%
Culture procedure	SNOMED	No	99%
Sensibility	SNOMED	With limited adaptations	100%
Concentration		With limited adaptations	99%
Frequency	SNOMED	With limited adaptations	94%
Service, department	SNOMED	Not available	0%



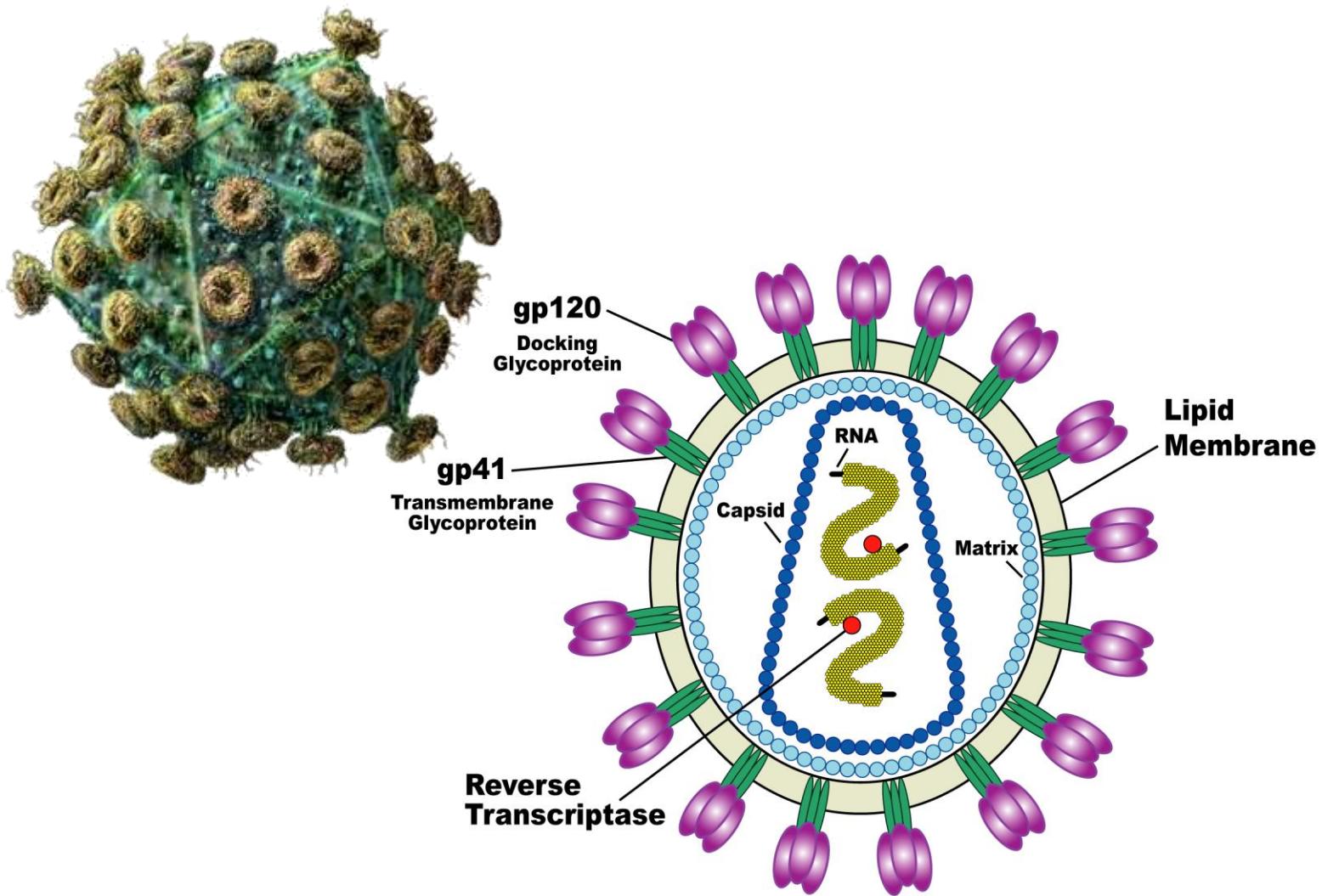
Time persistence

- Data, information
- Models
- Semantics
- Rules, knowledge
- History of the organisation





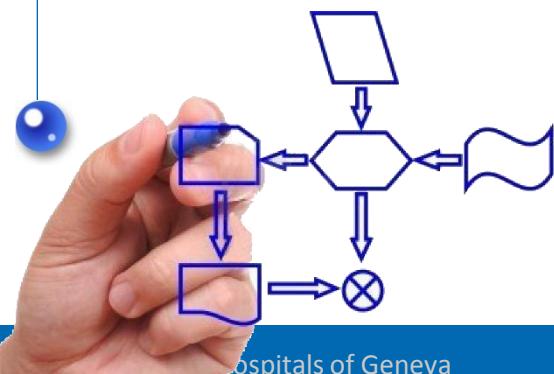
Evolution of significance





Hidden critical information

- Governance, organisational structure
 - Organisational history
- Transactional data
 - Messages, audits
- Stored data
 - PDF 1.0 born 1993
 - ISO 32000-1:2008 pdf 1.7
- Expert knowledge
 - Rules and evidences

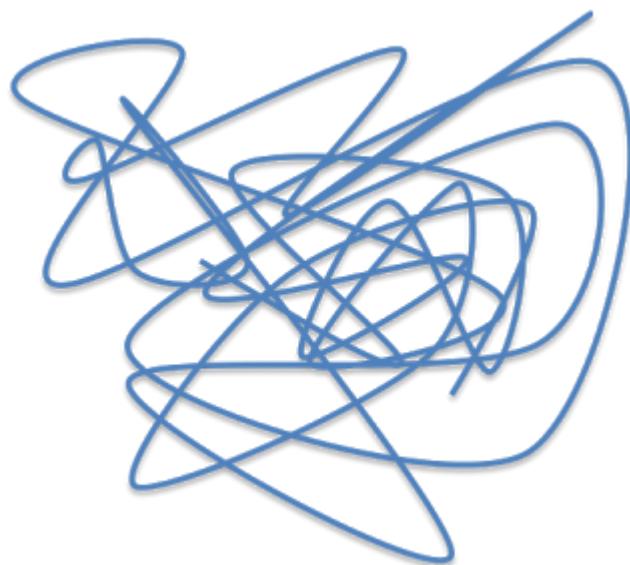
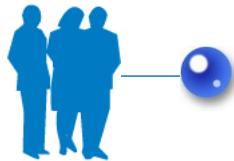




Data protection

- citizens privacy
- Managing consent
- Value of data – power of data







Interesting ...

nature

International weekly journal of science

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Published online 12 April 2010 | Nature | doi:10.1038/news.2010.178

[News](#)

Stories by subject

- [Genetics](#)
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Stories by keywords

- [genome wide association studies](#)
- [electronic medical records](#)
- [anonymization](#)
- [patient confidentiality](#)

This article elsewhere

[Blogs linking to this article](#)[Add to Digg](#)

Anonymizing patient records for genomics

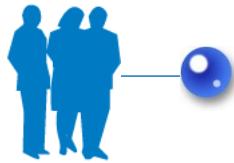
New method for concealing identity could open up more data for science.

Daniel Cressey

Combining genetic information with existing medical records could allow researchers to rapidly identify genes linked to diseases. But bringing together diagnostic and genetic information in one place risks compromising the confidentiality of patients.

Now a team from Vanderbilt University in Nashville, Tennessee, has developed a method they say can anonymize electronic medical records, eliminating the risk of individual patients being identified while preserving the ability of

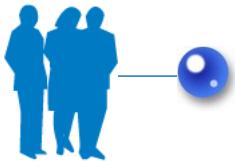




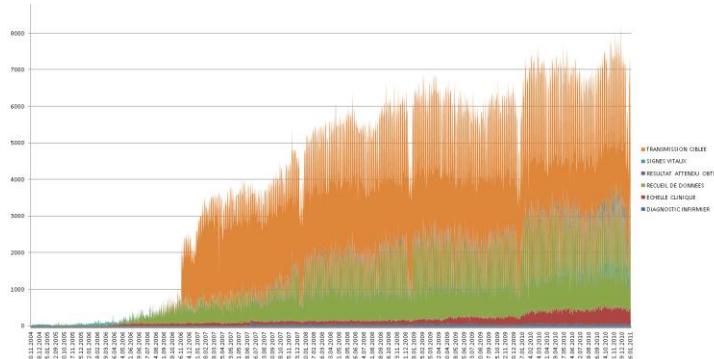
complexity

1. Medicine is a probabilistic science
2. data quality, completeness reliability
3. Capacity to describe unexpected events
4. Multi-dimensional data
5. Dealing with complexity instead of fighting complexity





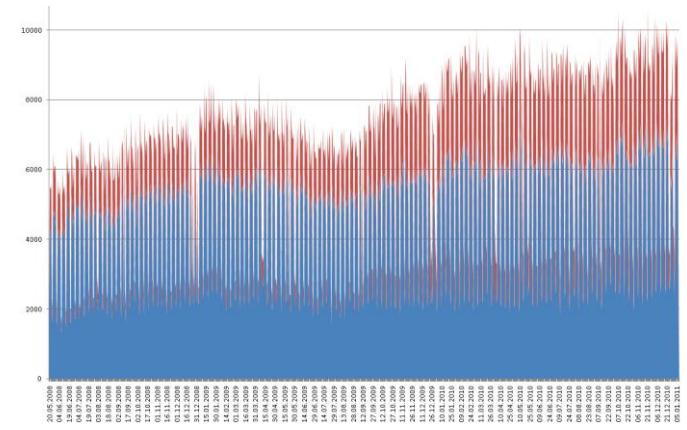
Mastering growth



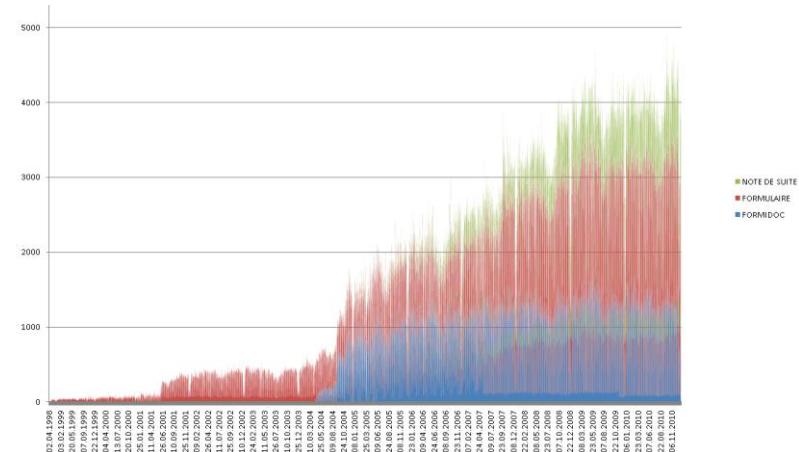
Daily nursing interventions



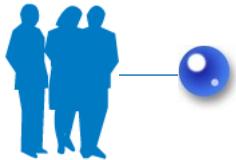
~ 200'000 daily interventions scheduled



Daily signed orders



Daily clinical documents signed



Truth and evidence are changing

NCBI Resources How To

lovis My NCBI Sign Out

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use [PubMed](#) directly.

uncomplicated urinary tract infection X Search

Clinical Study Categories

Category: ▼

Scope: ▼

Results: 5 of 933

Peri-interventional antibiotic prophylaxis only vs continuous low-dose antibiotic treatment in patients with JJ stents: a prospective randomised trial analysing the effect on urinary tract infections and stent-related symptoms.
Motzahn F, Haeni K, Birkhäuser FD, Roth B, Thalmann GN, Zehnder P. *JUU Int.* 2012 Dec 18;. *Epub* 2012 Dec 18.

OnabotulinumtoxinA for the Treatment of Patients with Overactive Bladder and Urinary Incontinence: Results of a Phase 3 Randomized Placebo-Controlled Trial.
Nitti VW, Dmochowski R, Herschorn S, Sand P, Thompson C, Nardo C, Yan X, Haag-Molkenteller C, EMBARK Study Group. *J Urol.* 2012 Dec 13;. *Epub* 2012 Dec 13.

Randomized Comparative Study for the Assessment of a New Therapeutic Schedule of Fosfomycin Trometamol in Postmenopausal Women with Uncomplicated Lower Urinary Tract Infection.
Palou J, Angulo JC, Ramón de Mata F, García-Tello A, González-Enguita C, Boada A, Sanz M, en representación de los investigadores del ensayo clínico MONE-14. *Actas Urol Esp.* 2012 Sep 17;. *Epub* 2012 Sep 17.

[Choice of antibacterial drugs in urinary infection].
Perepanova TS, Kozlov RS, Dekhnich AV, Palagin IS, Shevelev AN, Volkova EM, Égamberdiev DK. *Urologia.* 2012 Mar-Apr; (2):4-8.

Antibiotic resistance in urinary tract infections in college students.
Olson RP, Haith K. *J Am Coll Health.* 2012; 60(6):471-4.

[See all \(933\)](#)

This column displays citations filtered to a specific clinical study category and scope. These search filters were developed by Haynes RB et al. See more [filter information](#).

Systematic Reviews

Results: 5 of 55

Comparative effectiveness of antibiotics for uncomplicated urinary tract infections: Network meta-analysis of randomized trials.
Knotnerus BJ, Grigoryan L, Geerlings SE, Moll van Charante EP, Verheij TJ, Kessels AG, Ter Riet G. *Fam Pract.* 2012 Dec; 29(6):659-70. *Epub* 2012 Apr 19.

Antibiotic treatment of uncomplicated urinary tract infection in premenopausal women.
Naber KG, Wulk B, Wagenlehner FM. *Int J Antimicrob Agents.* 2011 Dec; 38 Suppl:21-35. *Epub* 2011 Oct 14.

The results of ureteral stenting after ureteroscopic lithotripsy for ureteral calculi: a systematic review and meta-analysis.
Pengfei S, Yutao L, Jie Y, Wuran W, Yid H, Hao Z, Jia W. *J Urol.* 2011 Nov; 186(5):1904-9. *Epub* 2011 Sep 23.

Urinary tract infections in the elderly population.
Matthews SJ, Lancaster JW. *Am J Geriatr Pharmacother.* 2011 Oct; 9(5):286-309. *Epub* 2011 Aug 12.

Uncomplicated urinary tract infections.
Wagenlehner FM, Hoyme U, Kaase M, Fünfstück R, Naber KG, Schmiemann G. *Dtsch Arztebl Int.* 2011 Jun; 108(24):415-23. *Epub* 2011 Jun 17.

[See all \(55\)](#)

This column displays citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines. See [filter information](#) or additional [related sources](#).

Medical Genetics

Topic: ▼

Results: 5 of 62

Kinetics of uropathogenic Escherichia coli metapopulation movement during urinary tract infection.
Walters MS, Lane MC, Vigil PD, Smith SN, Walk ST, Mobley HL. *MBio.* 2012; 3(1). *Epub* 2012 Feb 7.

Plasmid-mediated fluoroquinolone resistance determinants in Escherichia coli from community uncomplicated urinary tract infection in an area of high prevalence of quinolone resistance.
Longhi C, Conte MP, Marazzato M, Iebba V, Totino V, Santangelo F, Gallinelli C, Pallecchi L, Riccobono E, Schippa S, et al. *Eur J Clin Microbiol Infect Dis.* 2012 Aug; 31(8):1917-21. *Epub* 2011 Dec 31.

Drug resistance, serotypes, and phylogenetic groups among uropathogenic Escherichia coli including O25-ST131 in Mexico City.
Molina-López J, Aparicio-Ozores G, Ribas-Aparicio RM, Gavilanes-Parra S, Chávez-Berrocal ME, Hernández-Castro R, Manjarrés-Hernández HA. *J Infect Dev Ctries.* 2011 Dec 13; 5(12):840-9. *Epub* 2011 Dec 13.

Multiplex PCR-based reverse line blot assay for simultaneous detection of 22 virulence genes in uropathogenic Escherichia coli.
Kudinha T, Kong F, Johnson JR, Andrew SD, Anderson P, Gilbert GL. *Appl Environ Microbiol.* 2012 Feb; 78(4):1198-202. *Epub* 2011 Dec 9.

The repeat-in-toxin family member TosA mediates adherence of uropathogenic Escherichia coli and survival during bacteremia.
Vigil PD, Wiles TJ, Engstrom MD, Prasov L, Mulvey MA, Mobley HL. *Infect Immun.* 2012 Feb; 80(2):493-505. *Epub* 2011 Nov 14.

[See all \(62\)](#)

This column displays citations pertaining to topics in medical genetics. See more [filter information](#).

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32



KART

A Knowledge Authoring and Refinement Tool for Infectious Disease Management



Welcome debugIT (logout)

Repository
Editor
Disease
Pathogen
Condition
Antibiotic

Disease
Pathogen
Condition
Antibiotic

Disease
Pathogen
Condition
Antibiotic

Editor

LITERATURE
LITERATURE SUMMARY

MOST-CITED ANTIBIOTICS
ANTIBIOTIC SUMMARY

MOST-CITED ANTIBIOTICS

	ATC	Score	P	O
1. ciprofloxacin	J01MA02	★★★★★	34	92
2. fosfomycin	J01XX01	★★★★★	25	51
3. co trimoxazole	J01EE01	★★★★★	11	20
4. gentamicin	J01GB03	★★★★★	11	11
5. cefuroxime	J01DC02	★★★★★	7	9
6. piperacillin	J01CA12	★★★★★	7	8
7. amoxicillin clavulanate	J01CR02	★★★★★	7	21
8. amikacin	J01GB06	★★★★★	5	5
9. tetracycline	J01AA07	★★★★★	4	5
10. piperacillin tazobactam	J01CR05	★★★★★	3	4
11. ceftriaxone	J01DD04	★★★★★	3	4
12. norfloxacin	J01MA06	★★★★★	7	14

ANTIBIOTIC SUMMARY

Legend:

- J01D
- J01C
- J01M
- J01G
- J01X
- J01E
- J01A

LITERATURE

Isolation of fluoroquinolone-resistant rectal *Escherichia coli* after treatment of acute uncomplicated cystitis.
Kalpana Gupta, Thomas M Hooton, Walter E Stamm
PMID: 15911548 Jul 2005
Clinical Trial Journal Article Randomized Controlled Trial Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, P.H.S.

MeSH terms:
Cystitis
Escherichia coli

Abstract: Given increasing rates of co-trimoxazole resistance among uropathogens causing acute uncomplicated cystitis, fluoroquinolones, nitrofurantoin and fosfomycin are often considered as alternative empirical therapy. The choice between these drugs should depend in part on whether they are associated with the isolation of drug-resistant microbial flora. We conducted a randomized treatment trial to assess the effects of ciprofloxacin, nitrofurantoin and fosfomycin on the rectal microbial flora of women with acute uncomplicated cystitis, including isolation of fluoroquinolone-resistant strains.Pre-publication of results from this study has been published online in *Journal of Clinical Microbiology*.

Publication 1 of 25

LITERATURE SUMMARY

PMID:21140281	J01MA02	J01XX01	J01EE01	J01GB03	J01DC02	J01CA12	J01CR02	J01GB06	J01AA07	J01CR05	J01DD04	J01MA06	J01GB01	J01DC01	J01DE01	J01AA12	J01CA04	J01DD02	J01DD13	J01DH02
PMID:22184906																				
PMID:21244660																				
PMID:20497641																				
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PMID:20734713																				
PMID:20559725																				

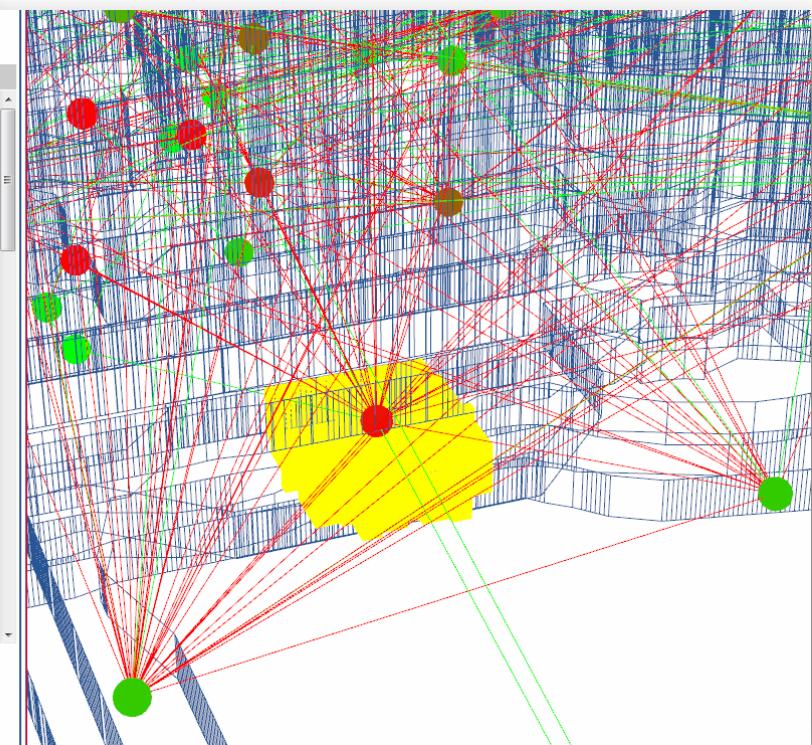
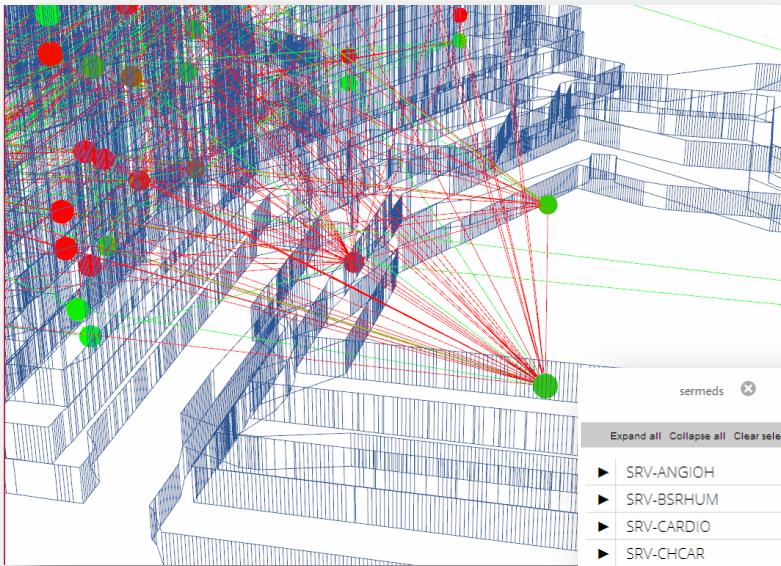
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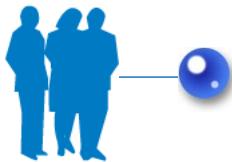
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BITEM
Bibliomics and Text Mining Group



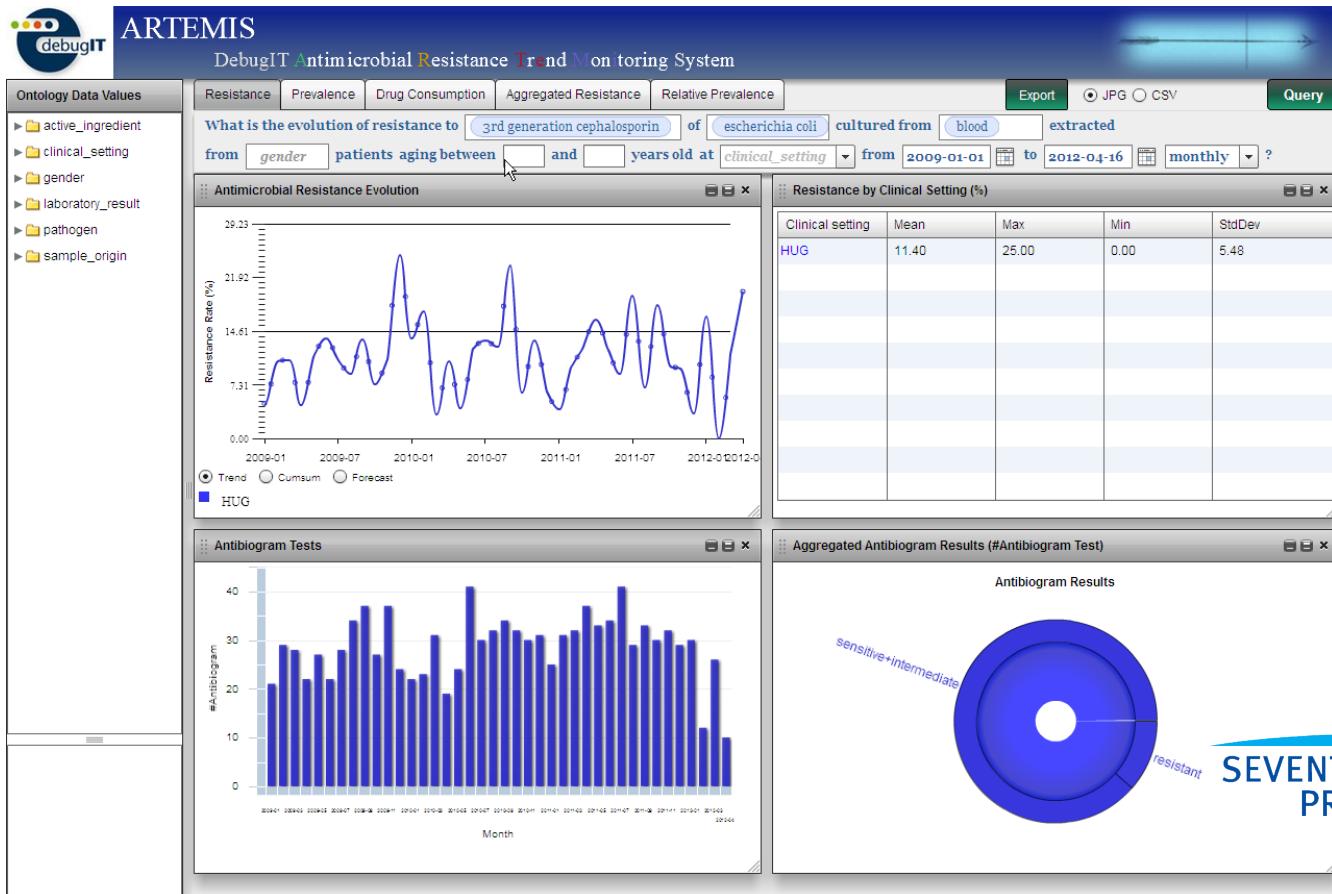
High number of dimensions





Antibiotherapies and drug resistances

What is the evolution of resistance of *<bacteria>* to *<antibiotic>* extracted from *<sample>* in *<period>*?





A joint undertaking between Academia & Industry



Innovative Medicines Initiative

Overview of the EHR4CR project

Electronic Health Record Systems for Clinical Research

<http://www.ehr4cr.eu>



Constraints :

Age

Before now

X Before Y

Occurrence

EHR4CR

Dashboard | Faculty Home | Members | My Account

AstraZeneca Pilot Study

Overview | **Query Worklist** | Study Manager

Terminology

Browse | Search

Expand the terminology to search a concept. The droppable elements are colored with blue.

Collapse all

- + EHR4CR terminology
 - + Demographic history detail (CAT)
 - + Disease entity (CAT)
 - + Surgically transposed transsexual (CAT)
 - + Gender unknown (CAT)
 - + Female (CAT)
 - + Male (CAT)
 - + Clinical finding (VS)
 - + Health care service entry (VS)
 - + Morphologically altered structure (VS)
 - + Drug or treatment (substance) (VS)
 - + Event (VS)
 - + Observable entity (VS)
 - + Clinical finding (VS)

Add a new criterion

Delete All | Save the query | Run | Clear

Male

AND

More than 17
Years Old

AND

{

Malignant neoplasms of ill-defined,

}

At Most 3 Month Before

{

Malignant neoplasm of prostate

}

AND

Enlarged lymph nodes

AND NOT

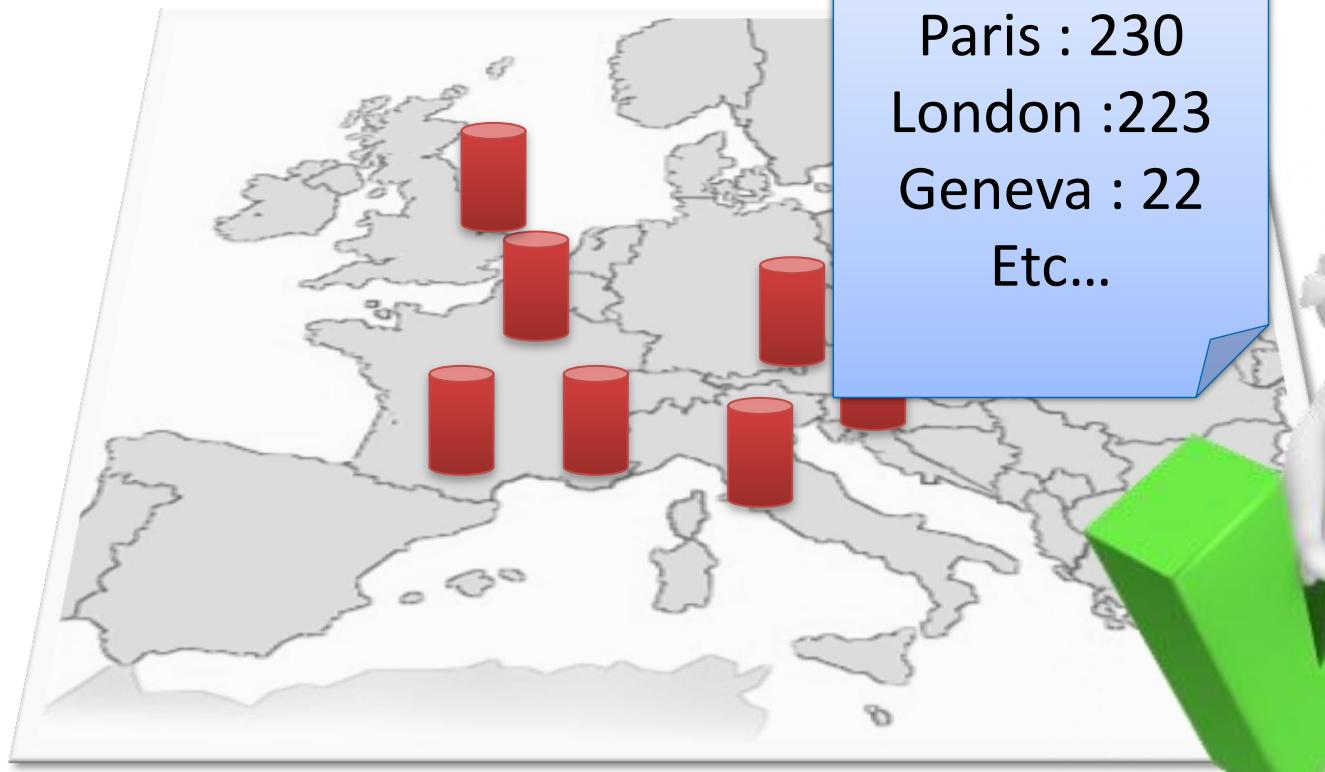
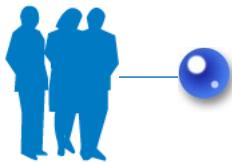
{

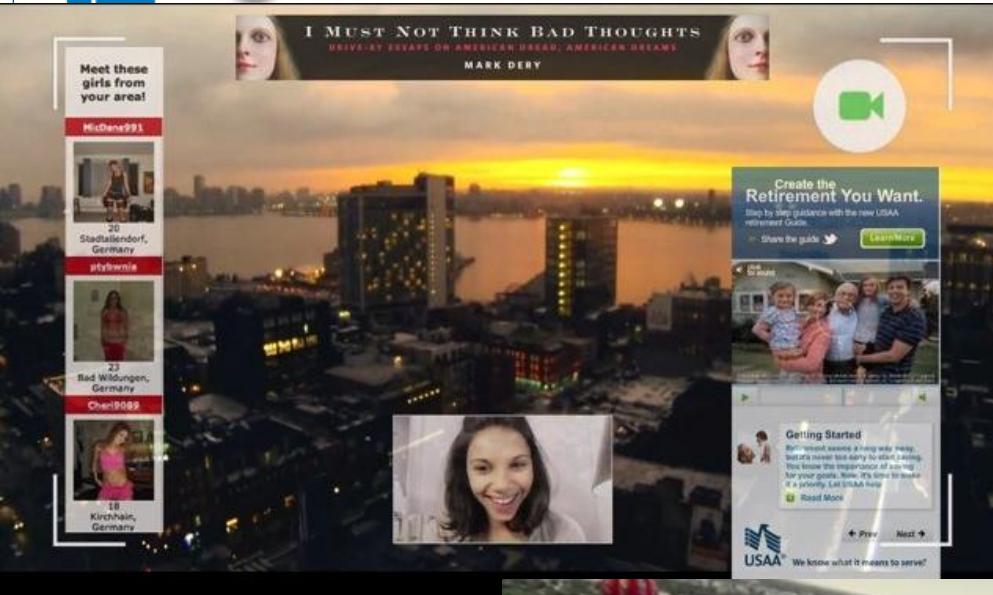
Cryotherapy

}

At Most 6 Month Before now

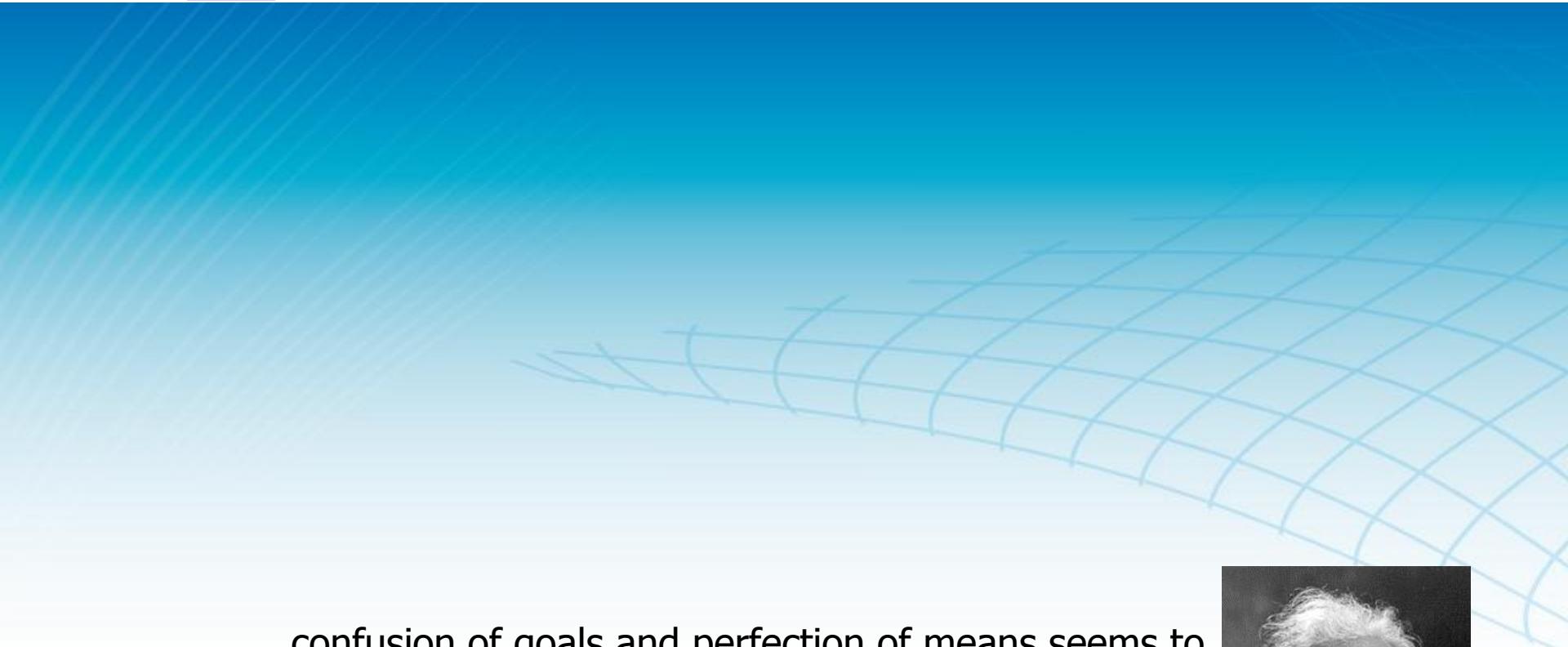
Add a new criterion





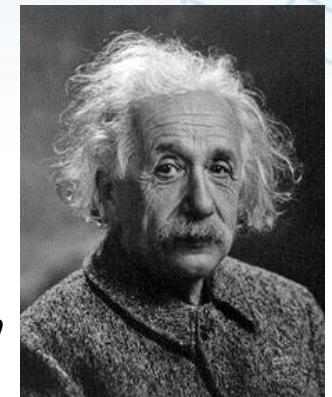
Google glass, 2013





confusion of goals and perfection of means seems to characterize our age

Albert Einstein



Prediction is very difficult,
especially about the future

Niels Bohr