

Ysbrydoledig • Cynnwys • Hysbysu

# EAHIL 2018 Caerdydd • Cardiff Inspiring • Involving • Informing

Title: Can we innovate how we measure scientific impact?

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Institution: Fondazione IRCCS Policlinico San Matteo of Pavia -Italy



☐ San Matteo Hospital is an Italian public research institute of national prominence.

Our library is *the only* 'hospital library' and is the reference point for all physicians, researchers and nurse staff looking for a literature research.







## The problem...

The <u>problem of measuring</u> the scientific and social impact of research publications has been of extreme interest to scientists and scholars since the inception of modern science, but it has always been hard to answer..





## **Bibliometrics**

- Bibliometrics is the application of quantitative analysis and statistics to publications such as journal articles and their accompanying citation counts.
- The main tool of bibliometrics is citation analysis:
  - ✓ Applies to journals (impact factor)
  - ✓ individuals (h-index)
  - ✓ and articles (citation impact)



#### **Alternative Metrics**

Altmetrics combines the traditional Bibliometrics tool with the use of the web

In this context, many web tools are often referred as <u>'social media'</u> due to their role in supporting communication and building communities





## Altmetric.com

 Altmetric (http://www.altmetric.com) born as a London-based start-up founded by Euan Adie in 2011.



- The portal provides these main products:
- Explorer for institution
- Explorer for publisher
- Altmetric for books
- Altmetric Bookmarklet
- Badges (also for repository)
- Individual users and librarians can use Altmetric.com with a free bookmarklet, while a commercial license is required in the case of publishers, funders and institutions

#### Altmetric Track.. More than Social Media

#### **News outlets**

- Over 1,300 sites
- Manually curated list
- Text mining
- Global coverage

## Social media and blogs

- Twitter, Facebook, Google+, Sina Weibo
- Public posts only
- Manually curated list

# Post-publication peer review

- Publons
- PubPeer

# Reference managers

- Mendeley, CiteULike
- Reader counts
- Don't count towards the Altmetric score

#### Other sources

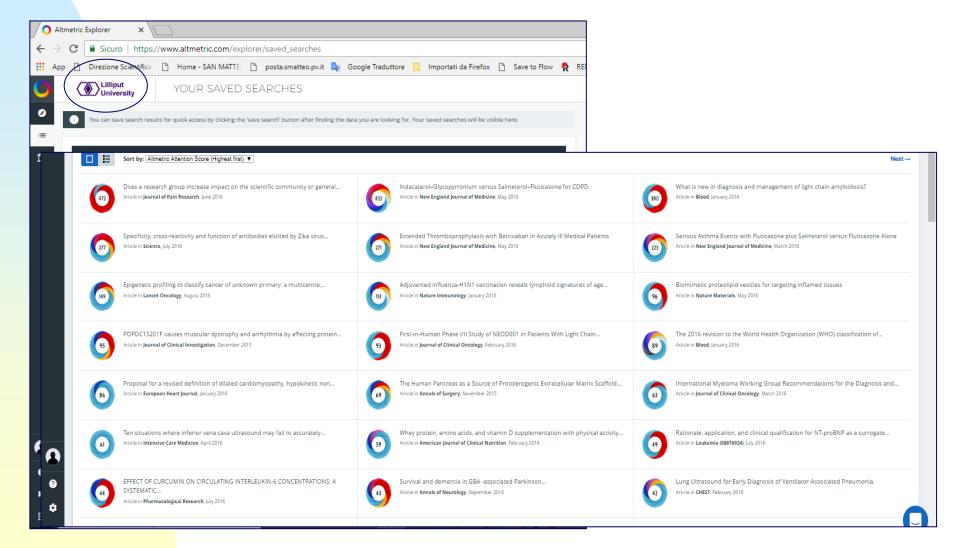
- Wikipedia
- YouTube
- Reddit
- F1000
- Pinterest
- Q&A

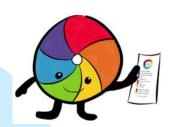
#### **Policy documents**

- NICE Evidence
- Intergovernmental Panel on Climate Change
- Many more...



#### **Our Trial**



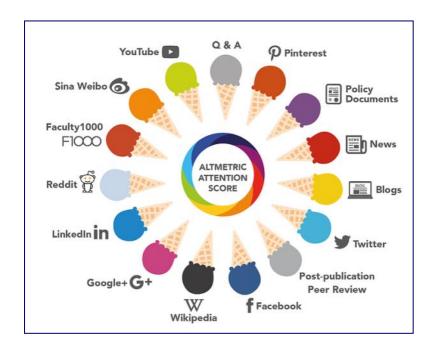


#### **Altmetric Donut**

The color and the number inside the donut changes for on each papers.

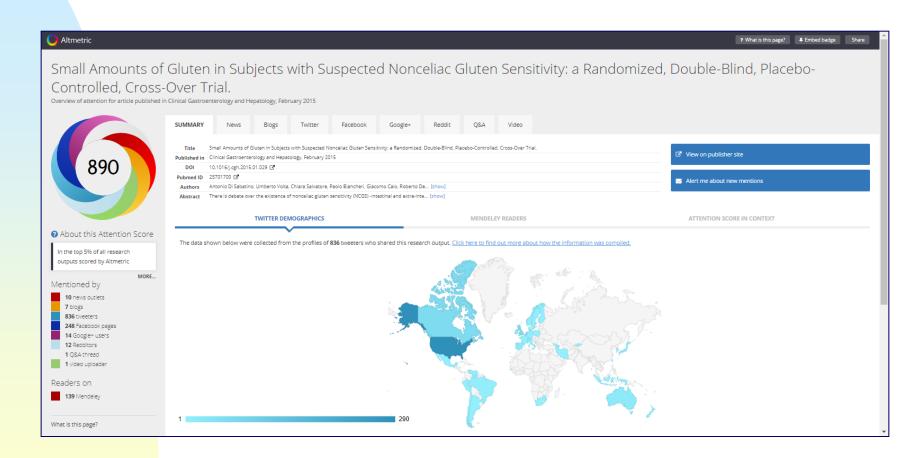
The colors reflect the mix of sources on which the article was cited. For example, blue means it has been tweeted.







#### **Donut Details**





Central database at the Ministry of Health call WORKFLOW 2.0

#### Workflow 2.0

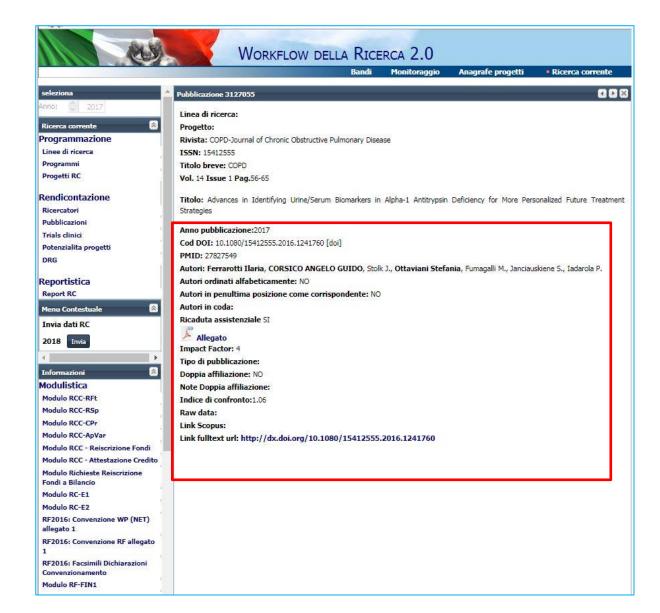


http://ricerca.cbim.it/index.html



#### **Article Record**

## Workflow 2.0

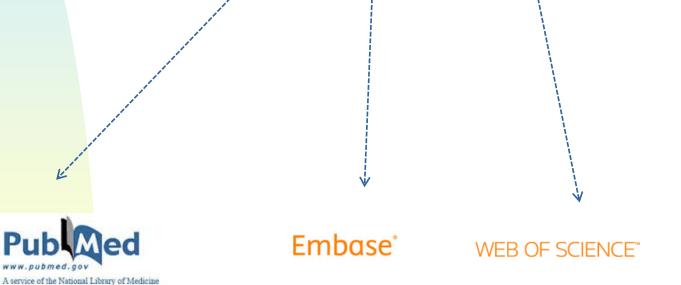




and the National Institutes of Health

## How do we collect data?

## **Affiliation Research**

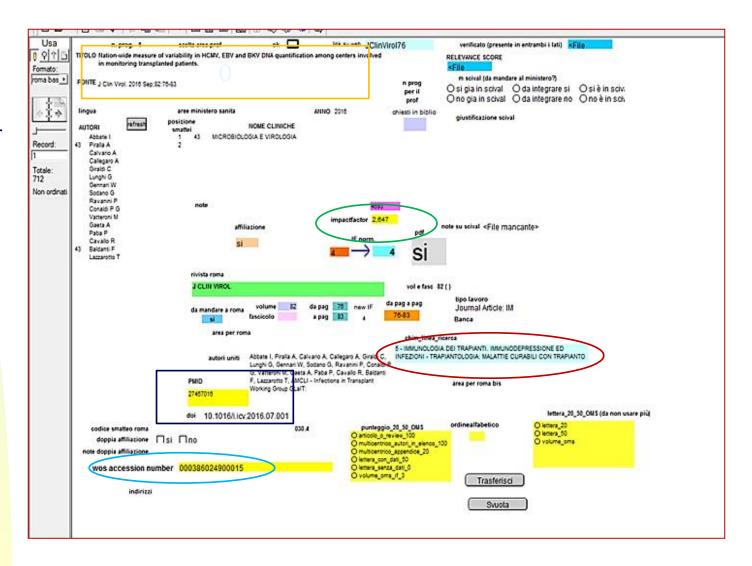






## **Central Database**

Record in our Database (by FileMarker 11)



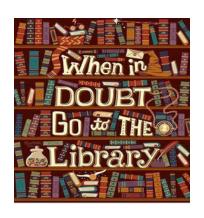


## How could we use these data?





## Our doubts...



- How to help our researcher with this new data?
  - ✓ Of course with: Courses, training, help in in completing cv...
  - √ something new?
- How how to use this data for the institution?
  - ✓ What are the clinics that get the most citations and Almetric score?
  - Which lines of research are most attractive? (maybe for funds or grants)
  - ✓ What was the citational trend over the years of our hospital?



# IF,DoI, PMID and WoS

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	a http://gateway.isiknowledge.com/gateway/Gateway.cdi? b 000381590300001 c &DestApp=WCS d http://gateway.isiknowledge.com/gateway/Gateway.cdi?	note wos doi puliko 10.1016/i.ahli.2016.04.013	testS incollato estrai eid test6 incollato da scival estrai parte eid da scival crea_eid_da_scival	
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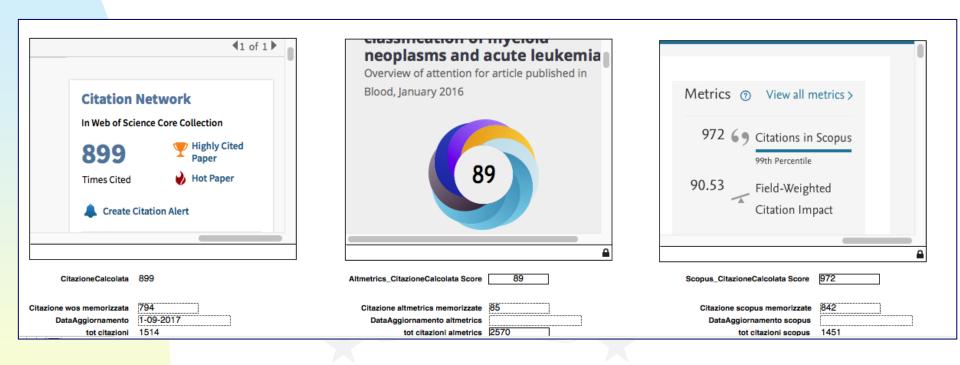


## **ALL Metrics**

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ARBIER O A. CRAZIA, A. HASSERJANA R. THEILLE J, DOROWITZ M. J. LE BIJAU M. M. BLOOM CAZDLA M. VARDIMANJ M. WE WORLD HEALTH ORGANIZATION CLASSIFICATION OF MICHAEL SANS AND ACUTE LEGICEMA.  BLOOD. 2016 MAY 18:127(20):2391-406  Impactfactor 11.847	WELOID  eid 2-82. was accession number  pmin 270922	0-84974560145 76333900009 54 82/blood-2016-03-643	i544		test4_costruito http://api.elsevier.com/content/abstract/citation-count? doi=10.1182/blood-2016-03 -6-436-44-httpAccept=iext/html&apiKey=6492f9c867ddf3e84baa10b597 tests.co.d. AUTHENTICATION_ERRORInvalid_API Key
Web of Science Incites Journal Citation Reports  Web of Science  Search  find ***	The 2016 revision to the World Health Organization (WHO) classification of myeloid neoplasms and acute leukemic Overview of attention for article published in Blood, January 2016		Privacy matt		
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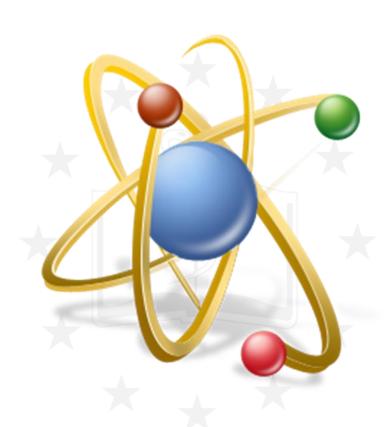


## **ALL Metrics**





## Correlation





## **Statistical Analysis**

- We <u>collected</u> the scientific production of the years **2011 -2016** of our hospital;
- We retrivied <u>citations</u> for each publication through Web Of Science and Scopus (citation received for each articles);
- Through the PMID and the DoI of each publication, we obtained each one's score on <u>Almetrics.com</u>;
- We launched the database update in early May



## **Global Score**

#### Global Score 2011-2016 for year

anno	n.	Impact factor		citazioni a scopus	Itmetrics score	
2011	568	2.739,964	22.523	22.647	922	
2012	645	3.045,352	17.461	8.594	1.234	
2013	617	3.400,921	20.253	16.281	3.356	
2014	634	2.872,156	12.522	12.462	2.777	
2015	610	2.903,494	8.469	7.353	3.839	
2016	642	3.458,768	5.711	5.594	4.662	
,	Totall 3.716	18.420,655	86.939	72.931	16.790	



# Score for operative units

#### SCORE 2011-16 | FOR OPERATIVE UNITS

	n.	Impact factor	citazioni wos	citazioni scopus	altmetrics score
PAINT THERAPY	7	60,19	60	65	628
INTERNAL MEDICINE 2 ° AND VASCULAR AND METABOLIC DISEASES	184	641,888	2.706	2.129	435
INTERNAL MEDICINE 1° AND ONCOLOGY MEDICINE	195	1.031,825	3.704	3.538	1.646
INTERNAL MEDICINE 3°	133	689,461	3.118	2.687	289
HOSPITALOF BELGIOIOSO	2	4,082	32	24	2
DERMATOLOGIC CLINIC	60	143,292	314	229	51
CLINICAL INFECTIOUS DISEASES	104	322,373	915	595	105
PEDIATRIC CLINIC	255	724,813	2.103	1.642	273
CARDIOLOGY DIVISION	141	977,045	3.902	3.201	711
HEMATOLOGY DIVISION	344	2.864,479	17.287	13.028	1.716
NEONATAL PATHOLOGY DIVISION	116	340,273	1.485	1.231	396
CLINICAL DISEASES RESPIRATORY SYSTEM	145	739,551	2.329	2.034	1.418
GENERAL SURGERY 1	64	214,529	877	797	139
GENERAL SURGERY 2	33	94,479	354	173	33
VASCULAR SURGICAL CLINIC	21	98,336	608	622	83
NEUROSURGERY CLINIC	26	79,538	219	166	258
OCULISTIC CLINIC	30	79,542	263	174	34
OPERATING UNIT OF HOSPITAL DENTISTRY	1_1_	1,858	11	14	
ORTHOPEDIC CLINIC	28	83,406	299	303	22
OBSTETRICAL-GYNECOLOGICAL CLINIC	106	366,608	957	780	96
OTORINOLARINGOIATRIC CLINIC	89	145,991	434	354	47
CARDIO-SURGERY DIVISION	77	402,607	1.737	1.217	201
PEDIATRIC DIVISION	29	82,406	156	101	60
UROLOGY DIVISION	10	23,979	135	106	6
PHARMACOLOGY DEPARTMENT	35	130,445	432	237	56
INSTITUTE OF PATHOLOGICAL ANATOMY	190	814,963	3.927	3.328	326
INSTITUTE OF RADIOLOGY	65	218,138	1.664	1.678	59
CHEMICAL-CLINICAL ANALYSIS SERVICE	60	194,429	675	494	103
RADIODIAGNOSTIC SERVICE	28	75,884	259	295	9
ONCOLOGICAL RADIOTHERAPY SERVICE	15	31,073	60	63	7
RECOVERY SERVICE AND FUNCTIONAL RE-EDUCATION	21	54,949	119	82	31
SERVICE ANESTHESIA AND INTENSIVE CARE 1	101	582,685	2.602	1.683	1.253
SERVICE ANESTHESIA AND INTENSIVE CARE 2	39	206,828	852	770	286
HEALTH MANAGEMENT	68	315,717	1.103	963	539

NFECTIVE AND TROPICAL DISEASES	148	549,673	2.835	2.310	288
MICROBIOLOGY AND VIROLOGY	198	763,671	2.815	2.162	590
NEFROLOGY AND DIALYSIS AND TRANSPLANTATION UNITS	74	211,656	718	636	367
UNITA' CORONARICA	197	1.559,42	7.601	6.464	1.536
RHEUMATOLOGY SERVICE	181	867,096	3.405	3.198	588
HEALTH PHYSICS	14	38,191	67	56	
SCIENTIFIC DIRECTION	401	1.548,971	5.588	4.201	1.340
MMUNOEMATOLOGY AND TRANSFUSION SERVICE	89	350,342	1.297	1.070	136
ACCEPTANCE SERVICE AND E.R	3	4,744	43	30	4
SERVICE AMESTHESIA AND INTENSIVE CARE 3	1	2,818	13	12	
UNITS 'OPERATIONAL PEDIATRIC ONCOLOGY	141	653,775	2.258	1.788	212
OPERATING UNIT OF TROMBOEMBOLIC DISEASES	14	361,432	5.683	7.061	1.397
Rth MEDICINE AND INTERVENTION ECOGRAPHY	19	77,352	237	262	6
OPERATIVE UNIT OF DIGESTIVE ENDOSCOPY	16	65,503	373	369	17
MEDICAL GENETIC UNITS	28	97,891	239	204	30
RESEARCH CENTER FOR MEDIALLY ASSISTED PROCREATION	79	199,802	1.330	1.543	291
NUCLEAR MEDICINE	8	13,819	7	9	4
AUXOLOGY RESEARCH CENTER	38	77,11	168	172	28
MEDICAL ONCOLOGY	183	879,246	4.199	3.221	450
LAB. TRAPIANTOLOGICAL AREA	125	779,663	3.437	2.055	460
LAB. INFECTIVOLOGICAL AREA	33	207,511	782	598	73
LAB. TECNOL BIOMED. AND BIOTECHNOLOGIES	316	1.829,624	8.569	7.375	1.352
AB. MEDICAL INFORMATICS AND MANAGEMENT MODES	55	368,904	2.944	2.749	35

Totald 5.133 24.345,876 110.344 92.348 20.522



# SCORE RESEARCH LINES 2011-16

#### LIST OF PUBLICATIONS FROM 2011 TO 2016 FOR RESEARCH LINES

	ı	n. article	impact factor	wos citations	scopus citation	altmetrics score
1 - TRANSPLANT OF THORACIC ORGANS AND INVALIDATING DISEASES OF HEART AND LUNGS - TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANTATION OF ORGANS, TISSUES AND CELLS		497	3.180,215	14.614	13.528	2.930
2 - TRANSPLANT OF ABDOMINAL ORGANS AND INVALIDATING DISEASES OF LIVER, RENE, PANCREAS AND BOWEL- TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUES AND CELLS		224	782,103	3.506	3.240	251
3 - TRANSPLANT OF BONE MARROW OR STEM CELLS AND HEMATOLOGICAL, IMMUNOLOGICAL AND ONCOLOGICAL DISEASES - TRANSPLANTATION: CURABLE DISEASES WITH ORGAN TRANSPLANTATION, FABRICS AND CELLS		458	3.462,882	19.165	16.059	2.115
4 - REPAIR MEDICINE OF ORGANS AND TISSUES. STAMINA CELLS. DIAGNOSTICS AND CELLULAR THERAPY - TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUES AND CELLS		193	795,509	2.655	2.249	646
5 - IMMUNOLOGY OF TRANSPLANTS. IMMUNODEPRESSION AND INFECTIONS - TRAPYTOLOGY: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUE AND CELLS		255	898,648	3.102	2.008	303
6 - CHRONIC DISEASES ON THE EIMMUNOINFETTIVE IMMUNE VALUE. IMMUNOTHERAPY - HIGH BIOMEDICAL AND TECHNOLOGICAL COMPLEXITY DISEASES		510	2.358,253	9.559	8.372	3.069
7 - DISEASES FROM ALTERED CONFORMATION AND PROTEIN OR GENETIC EXPRESSION. MODELS OF DISEASE - HIGHLY COMPLEX, BIOMEDICAL AND TECHNOLOGICAL COMPLEX DISEASE		324	1.787,157	7.071	5.707	2.078
8 - INNOVATIVE AND HIGH TECHNOLOGICAL DEMANDS: ARTIFICIAL ORGANS; MINI-INVASIVE OR ROBOTIC INTERVENTION; MEDICAL APPLICATIONS OF HIGH ENERGY PARTICLES - HIGHLY COMPLEX BIOMEDICAL AND TECHNOLOGICAL COMPLEX DISEASES		361	1.409,886	5.951	4.066	906
9 - DIAGNOSTIC, PROGNOSTIC AND INTEGRATED THERAPYUTIC EVALUATION AND INTERDISCIPLINARY MANAGEMENT OF HIGHLY COMPLEX BIOMEDICAL DISEASES - HIGHLY COMPLEX AND BIOLOGICAL AND TECHNOLOGICAL COMPLEX DISEASES		894	3.746,002	21.326	17.702	4.492
Tota	als	3.716	18.420,655	86.939	79.931	16.790



## **SCORE RESEARCH LINES 2016**

#### LIST OF 2016 PUBBLICATIONS FOR RESEARCH LINE

	Impact factor	citazioni wos	citazioni scopus	altmetrics score
1 - TRANSPLANT OF THORACIC ORGANS AND INVALIDATING DISEASES OF HEART AND LUNGS - TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANTATION OF ORGANS, TISSUES AND CELLS	655,221	852	871	903
2 - TRANSPLANT OF ABDOMINAL ORGANS AND INVALIDATING DISEASES OF LIVER, RENE, PANCREAS AND BOWEL- TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUES AND CELLS	164,017	180	171	73
3 - TRANSPLANT OF BONE MARROW OR STEM CELLS AND HEMATOLOGICAL, IMMUNOLOGICAL AND ONCOLOGICAL DISEASES - TRANSPLANTATION: CURABLE DISEASES WITH ORGAN TRANSPLANTATION, FABRICS AND CELLS	572,701	1461	1505	527
4 - REPAIR MEDICINE OF ORGANS AND TISSUES. STAMINA CELLS. DIAGNOSTICS AND CELLULAR THERAPY - TRANSPLANTATION: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUES AND CELLS	188,754	192	217	160
5 - IMMUNOLOGY OF TRANSPLANTS. IMMUNODEPRESSION AND INFECTIONS - TRAPYTOLOGY: CURABLE DISEASES WITH TRANSPLANT OF ORGANS, TISSUE AND CELLS	103,075	174	138	32
6 - CHRONIC DISEASES ON THE EIMMUNOINFETTIVE IMMUNE VALUE. IMMUNOTHERAPY - HIGH BIOMEDICAL AND TECHNOLOGICAL COMPLEXITY DISEASES	466,059	677	544	7777
7 - DISEASES FROM ALTERED CONFORMATION AND PROTEIN OR GENETIC EXPRESSION. MODELS OF DISEASE - HIGHLY COMPLEX, BIOMEDICAL AND TECHNOLOGICAL COMPLEX DISEASE	381,824	734	738	670
8 - INNOVATIVE AND HIGH TECHNOLOGICAL DEMANDS: ARTIFICIAL ORGANS; MINI-INVASIVE OR ROBOTIC INTERVENTION; MEDICAL APPLICATIONS OF HIGH ENERGY PARTICLES - HIGHLY COMPLEX BIOMEDICAL AND TECHNOLOGICAL COMPLEX DISEASES	181,072	264	230	155
9 - DIAGNOSTIC, PROGNOSTIC AND INTEGRATED THERAPYUTIC EVALUATION AND INTERDISCIPLINARY MANAGEMENT OF HIGHLY COMPLEX BIOMEDICAL DISEASES - HIGHLY COMPLEX AND BIOLOGICAL AND TECHNOLOGICAL COMPLEX DISEASES	746,045	1177	1180	1365
TOTALS	3458,76	5711	5594	4662



## For researchers!

#### List of publications for 2016

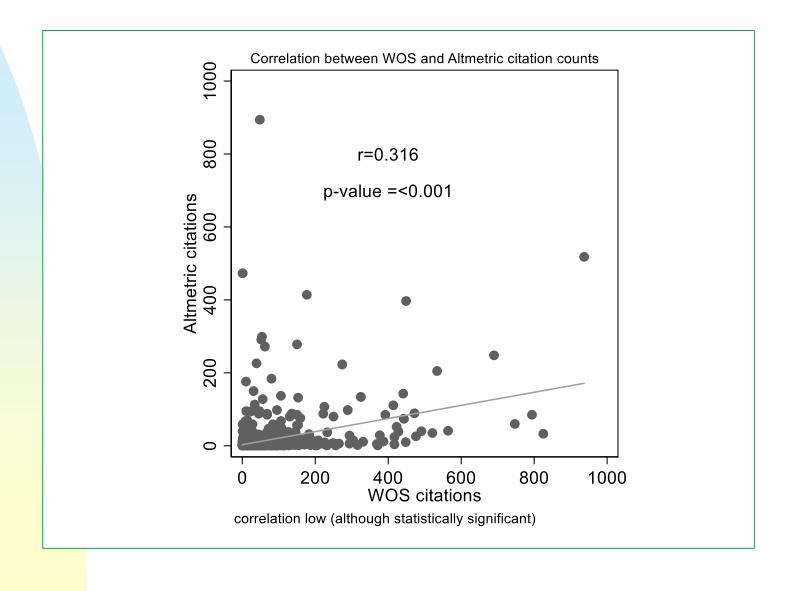
1 - TRANSPLANT OF THORACIC ORGANS AND INVALIDATING DISEASE.	60	C 73.15								
			HEART	AND						
LUNGS TRANSAPTOLOGY: CURARI E DISEASES WITH TRANSPLANTAT	LUNGS TRANSAPTOLOGY: CURABLE DISEASES WITH TRANSPLANTATION OF ORGANS.									
FABRICS AND CELLS	-	10/ 0	жолис							
		citazion wos	i citazioni acopus	altmetrics score						
AHMADI A, STONE G W, LEIPSIC J, SHAW L J, VILLINES T C, KERN M J, HECHT H, ERLINGE D,   11,5	31	8	8	3						
BEN YEHIDA O, MAEHARA A, ARIBUSTIN E, SERRIUYS P, GARCIAGARCIA HIA, MARILLA J.  PROGROSTIC DETERMINANTS OF CORCINARY A THEROSCLEROSIS IN STABLE ISCHEMIC HEART DISEASE: ANATOMY, PHYSIOLOGY, OR MORPHOLOGY? CIRC RES. 2016 JUL 8;119(2):317-29		-								
AKERBLOM A, CLARE R M, LOKHNYGINA Y, WALLENTIN L, HELD C, VAN DE WERF F, 4,35 MOLITERNO D J, PATEL U D, LEONARDI S, ARMSTRONG P W, HARRINGTON R A, WHITE H D,	2	2	2	I						
MOUTENIN D. J. PATIEL O. D. LEGNARID S, AMBSTRONG P W, MARRINGTON R A, WHITE H D,  "AT VIMAD PE, MANHEFEY N, THICOCO P:  ALELIMINERIA AND CARDIOVASCULAR EVENTS IN PATIENTS WITH ACUTE CORONARY  SYNDROMES RESULTS PROM THE TRACER TRIAL.  AMHEART J. 2018 AUG;178:1-8										
ARBUSTINI E, FAVALLI V, NARULA N, SERIO A, GRASSO M 17,73	29	26	23	I						
LEFT VENTRICULAR RONCOMPACTION: A DISTINCT GENETIC CARDIOMYOPATHY?  J AM COLL CARDIOL. 2016 AUG 30;88(9):949-66				_						
ARBUSTINI E, KODAMA T, PRATI F: 7,81	5	0	0	7						
SINLAR PLAQUE COMPOSITION IN MEN AND WOMEN WITH STABLE CAD.  JACC CARDIOVASC IMAGING. 2016 AFR;3(4):408-10				_						
BADAGLIACCA R, POSCUA R, PEZZUTO B, PAPA S, PESCE F, MANZI G, GINNNETTA E, RAINERI Z, S. CHISHA M, SCIOMER S, RARICLA D, FRANCIA M, CARBONE I, PEDELE F, VIZZA CO RIGHT VERTIFICILAR CONCENTRIC HYPERTIFICHMY AND CLINICAL WCRSENING IN DICKARNE FILLMONARY ARTERIAL HYPERTENSION PLEAT LINES THANKARDAM ATTERIAL HYPERTENSION PLANCING	9	3	2	_1_						
BALDI E, SAVASTANO S, CANEVARI F, RAIMONDI M, PAVIA CARC RESEARCHERS: 5,41		1 0	1 0	1.1						
WHEN AN COLD PACEMAKER MISLEADS A NEW AUTOMATED EXTERNAL DEFIBRILLATOR. A  CASE FROM THE PAVIA CARE (CAPDIAC APREST REGISTRY).  RESUSCITATION. 2918 JAN 36 ±10-1	•									
BARCO S, WHITNEY CHEUNG Y, COPPENS M, HUTTEN BA, MEJERS JC, MIDDELDORP S: 5,81	2	8	12	I						
IN 1VIO REVERSAL OF THE ANTICOAGULANT EFFECT OF RIVAROXABAN WITH FOUR-FACTOR PROTITROWING OWNERS CONCENTRATE BR J HAEMATOL 2016 JAN;172(2):255-61	_									
BOHULA E A, BONACA M P, BRAUNWALD E, AYLWARD P E, CORBALAN R, DE FERRARI G M, HE   17,2	12	20	19	12						
P, LEWIS BS, MERLIM PA, MURPHY SA, SABITINE MS, SCRICIAS M, MORPOWD D.  ATHEROTHRONDIC RISK STRETICENTICN AND THE EPRICACY, AND SAFETY OF VORAPAXAR IN PATIENTS WITH STABLE ISCHEMIC HEART DISEASE AND PREVIOUS MYCCAEPOLIA. INFARCTION CIPCULATION. 2016.JUL 28;134(4):309-13			-							
CAIMMI S, LICARII A, CAIMMI D, RISPOLI A, BARALDI E, CALABRESE F, MARSEGLIA G L NEUROENDOCRINE CELL HYPERPLASIA OF INFANCY: AN UNUSUAL CAUSE OF HYPOXEMIA IN	4	2	1							
CHILDREN. ITAL J PEDIATR. 2016 SEP 15;42(1):94										
CAMPO I, LUISETTI II, GRESS M, TRAPNELL B C, BONELLA F, GRUTTERS J, MAKATA K, VAN MOTTIG A, TRALLIG, CROLLIG WL. MOTTIN V, CHIMIXTA T, INDUE Y, BRASCHI A, BONIZZONI G, MOTTIG A, TRALLIG, CROLLIG WL. MOTTIGATIC SAND FROM THE AVECUAR PROTEINGES: A GLOBAL ORPHANET JARAFOR SUST BASE STATISTISTS.	_	9	12	2						

CAMPO I, LUISETTI M, GRIESE M, TRAPNELL B C, BONELLA F, GRUTTERS J C, NAKATA K, VAN MOORSEL C H, COSTABEL U, COTTIN V, ICHINATA T, INCUE Y, BRASCHI A, BONIZZONI G, IOTTI GA, TANELLIC, ROOI G, WILL INTERNATIONAL STUDY GROUP.	6,136	4	6	
A GLOBA'S LIRVEY ON WHOLE LUNG LAVAGE IN PULMONARY ALVEOLAR PROTEINOSIS. CHEST. 2019. JUL;150(1):251.3 CAVENDER M. A. BHATT D. L. STONE G. W. WHITE H. D. STEG. P. D. GIBSON C. M. HAMAN C. W., PRICE M. J. LEONARDI S., PRATS J., DELARGYRIS E. N., MANAFFEY K. W., MARRINGTON R. A.	17,202	6	7	I
PRICE M. J. LECNARDI S., PRATS. J., DELAPIGNIS E N., IMAHAFEY N. W., HARRINGTON R. A., CHAMPON PHOEMIX INVESTIGATION R. A. CONSISTENT REDUCTION IN PERIPROCEDURAL MYOCAPIDAL INFARCTION WITH CANGRIGOR AS ASSESSED BY MILITIRE DEFINITIONS: FINDINGS FROM CHAMPON PHOEMIX (CANGRICOR AS ASSESSED BY MILITIRE DEFINITIONS: FINDINGS FROM CHAMPON PHOEMIX (CANGRICOR SESSED STANDARD THERAPY TO ACHEVE O'PTIMAL MANAGEMENT CIRCULATION. 2015 SEP & (194(19):729-83)				
CIPRIANI M, LANDOLINA M, OLIVA F, GHIO S, VARGIU S, RORDORF R, RAINERI C, AMMIRATI E,	1,658	5	3	
PETRACOI E, CAMPO C, BISETTI S, LUNATIM WOMEN WITH DISINGHEME CARDOMYOPATHY HAVE A FAVORABLE PROGNOSIS AND A BETTER LEFT VENTRICULAR REMODELING THAN MEN AFTER CARDIAC RESYNCHRICULATION HIERAPY JCARDIOVASC MED (HAGERSTOWN). 2016 APR;17(4):291-8				
CIPRIANI M, LUNATI M, LANDOLINA M, PROCLEMER A, BORIANI G, RICCI RP, RORDORF R, MATASSINI MV, PADELETTI L, IACOPINO S, MOLON G, PEREGO GB, GASPARINI M; ITALIAN	5,135	4	4	7
CLINICALSERVICE PROLECT INVESTIGATORS: PROCONJOTIC DIFFICATIONS OF MITRAL REGURGITATION IN PATIENTS AFTER CARDIAC RESYNCHRONIZATION THERAPY EUR J HEART FAIL 2018 AUG;18(8):1080-8				
COSTA F, ADAMO M, ARIOTTI S, FERRANTE G, NAVARESE E P, LEONARDI S, GARCIA-GARCIA	3,863	4	6	
N YEAROOT P VALGIMEL IN LEFT MATTEROR DESCRIPTION OF CONTROL AT THE THE PROCESS OF T				
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GOIGIG ( WISMO N: CHRONG THROMBOENBOUC PULMONARY HYPERTENSION: FROM TRANSPLANTATION TO DISTAL PULMONARY ENDARTERECTOMY JHEART LUNG TRANSPLANT. 2016 JUN 25(6) 827-91				
DEICHOUX M, LANG I, PERKEZABA, J, JANSA P, CARMINI MA, SHLIDER R, BRESSER P, TORBICHA MELLEMALER, SLEVCHAI, SIMOVON, HARBERA JA, DE PRETOT M HOEFER MA, CARVE S, SPECH R, GONEZ SANCHEZ MA, KOVAZS G, AIS X, AMEROZ D, THEACY C, MORSOLINM, LAWKNS D, LINIONER I, OARTEVELLE P, MAYER E, SIMONERO LINIONERO LONASTERM CULTOME OF PATIENTS WITH CHROMOTHROMODIMENUC PULMONARY HYPERTISMOIN RESILLER FROM AN HYPERTISMOIN RESILLER FROM AN HYPERTISMOIN RESILLER FROM AN HYPERTISMOIN AND LINIONERO PROPERTY OF CONTROL THROMODIMENUC PULMONARY CIRCULATION. 2016 MAR 1;138(9):595-97.	17,202	45	58	31
DI CARLO S, ROSSI E, POLITANO G, INGHILLERI S, MORBINI P, CALABRESE F, BENSO A, SAVINDA, COVA E, ZAMPIERID, MELONI P. IGUNIPICATION OF MININAS POSTUTALLY INVOLVED IN BRONCHICUITS CRUITERANS STRUCE AZ CAPITE ATTAINAS STUDY PLUS CHE 2014 AUG 52:1(8):E1916771	3,057	1	2	
DINI F.L., CAPLLICCIÓ E, SIMONIUC A, BAGIOLI P, REBOLDÍ G, GALEOTTÍ G G, RAINERÍ C, GARGANÍ I, SCEIS I, MANCOLI G E, CANITTÓ A, ROSSI A, TEMPORELI P L, GHIO S, NETVORTE LASS LI TRASQUADI INEBLATI PALILE STLOY ROPUS DE REPORTE DE REPORTE STLOY ROPUS DISTRIBULAR RECOVERY DURING REPORTANTE DE STORY ROPUS LIBERTANIA DE REPORTE SILVANIA. IN PARENTS WITH OPHONIC HEART FALURE WITH REDUCED EJECTION FRACTION.	5,135	3	_4_	
DISERTORI M, MASÈ M, NARUIA N, MAZZOLA S, DAL PIAZ EC, QUINTARELLI S, CRISTOCRETTI A, MARINI M, RAVELLI F, ARBESTINI E RTIRLI, FIBRILLATION AND PIPA GERE P SASH MATTON: ARE CARDIOLOGISTS HELPLESS GERENOVICOS CHES. INVENTA	1,658	1	1	1_
DUSIV, GHIDONIA, RAVERA A, DE FERRARI G M, CALVILLO L CHEMORINES AND HEART DISEASE: A NETWORK CONNECTING CARDIÓVASCULAR BIOLOGY TO MANURE AND AUTONOMIC NETWOLS SYSTEMS. MEDIATORS INFLAMM. 2016;2016;500:2047	3,418	0	5	<u> </u>
ESPOSITO S, ZAMPIERO A, BIANCHINI S, MORI A, SCALA A, TAGLIABUE C, SCARRABBA C S, POSSALI E PRIALLA A, PRINCPI N. IN PROPERTIES DE RESPIRATORY INFECTIONS DUE TO ADMONISTRATE OF THE PRINCPI STATE OF THE PRINCPI STATE OF T	3,057	1		

CAVAGNA L. CODILLO V. GHID S, SCIRÈ CA, GUZZAFAME E, SCELSI L, ROSSI S, [2,133] 1 2 2 MARTIELIOCO CAPATRALIS: UNDINGROSED CONNECTITE TISSUE DISEASES: HIGH PREVALENCE IN PULMONARY ARTIENIAL HYPERTISSION PATRIETIS
MEDICINE (BALTINORIE). 2016 SEP/95(90) S4827  WEDZICHA JA, BANERJI D, CHARMAN KR, VESTBO J, ROCHE N, AYERS RT, THACH C, FOGEL   59,559   177   205   414
R, PATALANO F, VOGEMBIER CF, AND CEPVERI I FOR FLAME INVESTIGATORS: INDIACATERIC LÓC POPPRONIMO VERSUS SAUMETEROL-FLUTICASONE FOR COPD. N ENGL. J MED. 2016 JUN 9;374(2):2222-94
CONTOLIN, SQUIDGROP, DI MARCO F, SICICIAL CORENCO, BEADOD F, SANTUS P SOLICIA DE LE SEPECTS OF ACLIDINIUM ON DETERMINANTS OF COPIO SEVERITY, SYMPTOMS AND QUALITY OF COPIO SEVERITY, SYMPTOMS AND QUALITY OF COPIO SEVERITY OF COPIO DESTRUCT PLUMON DIS. 2016 DES 511:2043-3650
LOMBARDI C, RAFFETTI E, CAMINATI M, LICCARDI G, PASSALACOUA G, RECCARDINI F,   3,475   6   8   15   RIDCLO E, SENNA G, STEINHLIBER G, MILANESE M; AND CORSICO AG FOR ELSA STUDY   600UP:
PHENOTYPING ASTHMA IN THE ELDERLY ALLERIGIC SENSITIZATION PROFILE AND UPPER ARRIVATS COMBEDITY IN PATENTS OLDER THAN 64 YEARS. ANN ALLERGY ASTHMA MINUNOL. 2016 MAR;116(3):206-11
MONTELIA S, BARALDI E, CAZZATO S, ARALIA R, BERARDI M, BRUNETTI LM, CARDINALE F, 1,814 5 4 13  CUTHERA R, DE BENEDICTIS FAN, DI PALMO E, DI PILLO S, FENJU G, LA GRUTTA S, LOWBARDI F, PACCHETIN G, SATMAMARIA F, LULIAMN N, RIVODIN F, ITALANA POLDITICI SEVERE ASTHAIA NETWORK (PSAN) ON BEHALF OF THE ITALIAN SOCIETY OF PEDIATRIC RESPRACTOR DISSASSE SANIF.
SEVERE ASTHMA FEATURES IN CHUDREN: A CASE CONTROL ONLINE SURVEY. THAL J PEDIATR 781 AM 22-29  LATE A. ANCONA ME. FERRI L. MONTORFANO M. MANGIERI A. REGAZZOLI D. GIANNINI F.   7-83   6   6
LATE A, ANCONA NE, FERRI L, INCITOREAND M, MANGIERI A, REGAZZOU D, GIANNINI F, 7.83 6 6 MINANCO F, GEGLO MO ESSENTS A, AFREIO, COLONGO A, AGRICOLAE. PERICUTARIOUS DIRECT ANNILOPALSTY WITH CARDIOBAND TO TREAT RECURRENT MITTAL RESURFACTION AFTER MITTACLUP MINANTATION. JACC CARDIOVASC NTERV. 2016 SEP 26;2(18):E191-2
SERIO A, FAVALLI Y, GIULIANI L, MARULA N, GRASSO M, BORRONI RG, BERTHERAT J, PEISSEL 17,799 0 0 0 9 9 0 0 4 9 0 0 0 0 0 0 0 0 0 0
GRASHELT, LEFERNIK R, KOSTER PM, MASTERSON S, BOTTIGER PM, HERLITZ, MYREIT J, 5,414 62 25 TIELBELAND, BOTTE FR, MARRIER H, BURRIN M, MOLS F PMZBESCÓVEL, CHANDES M, SOLLES R, WISSINEERIS M, SALO A, HUBERT H, NINCLADOI IN, LOCO G, SWAYASDOTTER M, SHEMPAND F, WHIGH FP, LCARRIER C, PRILS R, CELLA G, CORPERA M, CARPICES ID, PARFAY V, TRENCES S, MARKOTA A, STRÖMENĞE A, BURKANT M, FERNINS GD, BUSSAERT LEBESCA ONES'T MATONS, ONE EUTREP, COM RESISTIN'S A PROSPECTIVE ONE MONTH
ANALYSIS OF OUT-OF-HOSPITAL CARDIÁC APREST OUTCOMES IN 27 COUNTRIES IN EUROPE. RESUSCITATION. 2016 AUG;105:188-95
PICA S, BALLESTRERO G, PISTIS G, CRIMI G: ACUTE STEM THROMOSIS UNVELS TWO ELECTROCAEDIOGRAM PATTERNS IN A PATIENT  15,064 0 0 0  WITH DE WINTER TWAVES ANTERIOR MYCOARDIAL INFARCTION. EUR HEART J. 2016 SEP 14,37(35):2736
TAVAZZI G, VIA G, BRASCHI A, PRICE S: 6,198 1 1 1 AN 82 YEAR OLD WCMAN WITH ONGOING DYSPNEA CHEST, 2019 (Jul. 150) (139 E11 11 11
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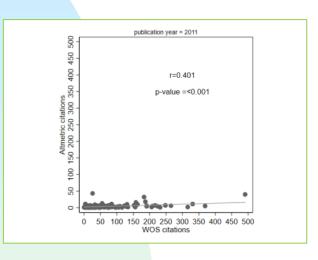


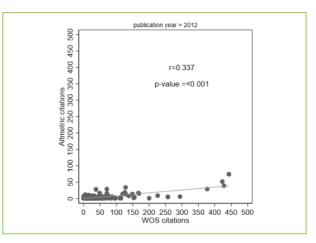
## **WOS Citations and Altmetrics Score**

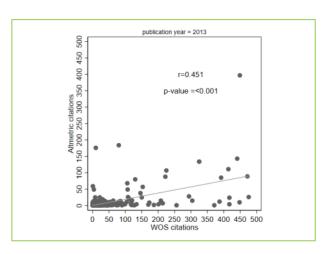


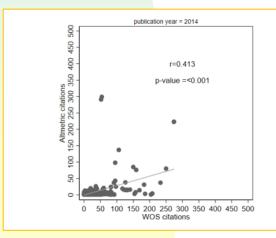


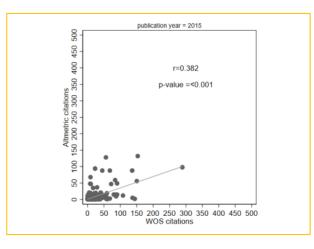
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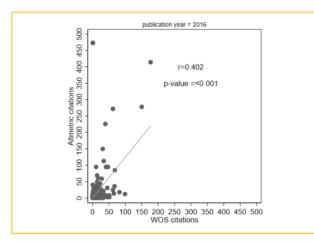








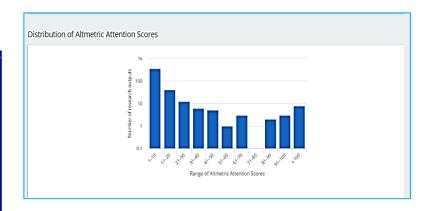






# 2016 -Altmetric distribution

type	variable	N	max
blog	mentions	466	4
f1000	mentions	466	1
facebook	mentions	466	23
google	mentions	466	9
linkedin	mentions	466	0
mendeley	mentions	466	525
news	mentions	466	67
patent	mentions	466	13
peerreview	mentions	466	1
pinterest	mentions	466	0
policy	mentions	466	2
qa	mentions	466	0
reddit	mentions	466	1
syllabi	mentions	466	19
twitter	mentions	466	390
video	mentions	466	1
weibo	mentions	466	0
wikipedia	mentions	466	27



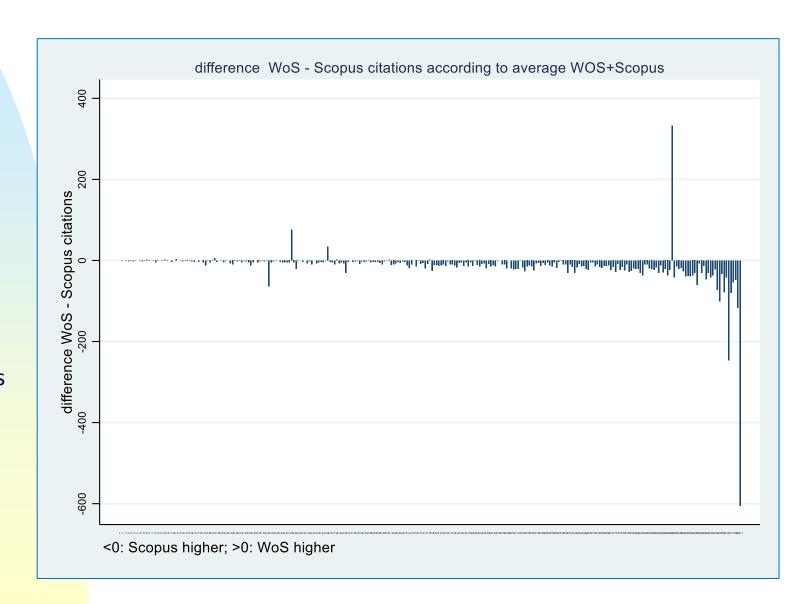




## **Wos VS Scopus citation**

Wos

Scopus



## From our study:

- Good correlations are observed, and a high percentage of papers have their own Altmetric score;
- Altmetrics could act as reliable tools in evaluating both researchers and departments and research lines;
- In our institution, a high score was obtained by many items, both within the research community (e.g. Mendeley readers) and the general public (Social Media, news, Wikipedia).



## **Conclusion**

- Altmetrics could contribute to the "creation of value" and have a more complete view on the important question of the democratization of evaluation ...
- It can represent an interesting and relevant complement to citations
- Together with traditional metrics, they can be a useful tool in guiding decision makers when funding public research.
- Nevertheless, further investigations are still needed to explore and understand what they measure and how can they be used in research evaluation.
- Librarians could play an active role.



## **Future Porposes...**

- <u>extending</u> the analysis to our scientific production for the next years.
- <u>measure</u> the broad impact of our researchers in the <u>academic</u> community and on the <u>society</u> in a different way from what has traditionally been done.
- <u>explore</u> the possibility of the Altmetrics to traditional indicators as a possible parameter to assess the impact of scientific works
- Last but not least we would like to <u>study</u> how and if <u>libraries</u> could use these new indicators in their daily work

# Thank you for your attention!

Questions?



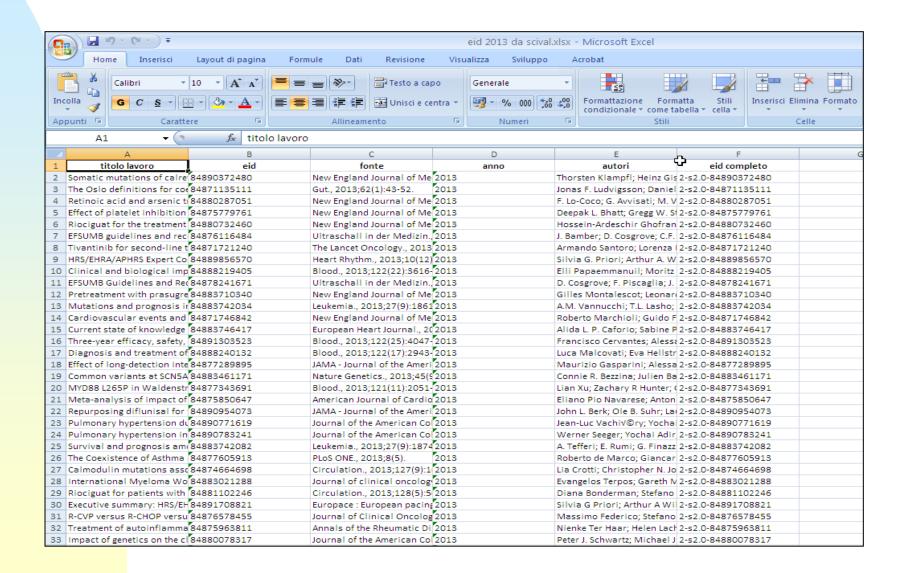






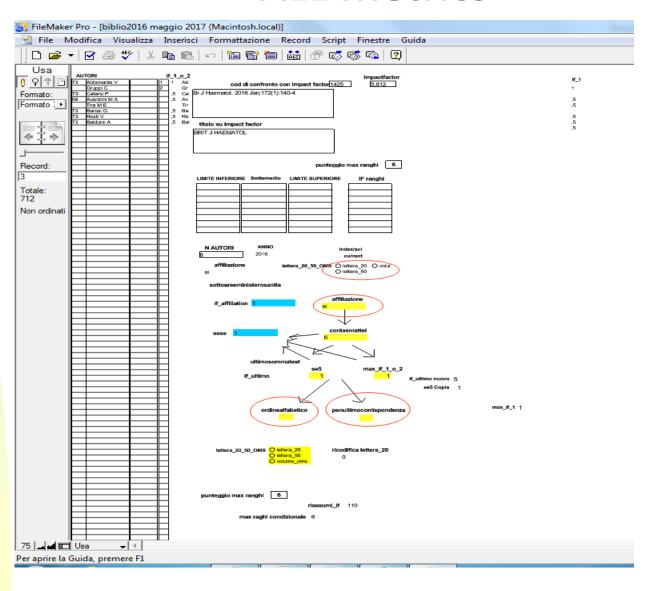


## **Scopus EID from Scival**





## **ALL Metrics**





#### **New Tools**

- The main scientific communication is conditioned by web-based tools, particularly by e-only journals.
- The development of tools even more Web 2.0 oriented has profoundly changed the scientific communication process

```
Aggregators Folksonomy Wikis

Blogs Participation Six Degrees Usability Widgets
Recommendation Social SoftwareFoAF
Recommendation Forpetual Bata Simplicity AjAX
Videocasting Podcasting Collaboration Perpetual Bata Simplicity AjAX
Audio IM Video Web 2. Ocss Pay Per Click

UMT5 Mobility Atom XHTML SVG Ruby on Rails VC Trust Affiliation
OpenAPIs RSS semantic Web Standardseo Economy
OpenID Remixability REST StandardizationThe Long Tail
DataDriven Accessibility
Microformats Syndication
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http://en.wikipedia.org/wiki/File:Web\_2.0\_Map.svg

New tools emerge



## **Pure with Altmetric Donut**

