



Assuring Quality Health Care Delivery in Asia

How to Improve Better Life for RA Patients Beyond Hurdles

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National Yang-Ming University

Outline

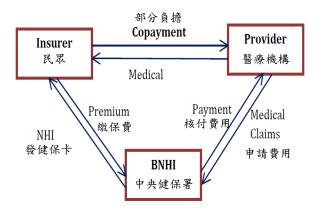
- Taiwan Profile
- Debrief Healthcare System in Taiwan
- Patients Involved in Decision Making
- Hurdles to Access Biologics Treatments
- Benchmarking Studies
- Conclusion

Taiwan: The Formosa-NHI

Bureau of National Health Insurance responsible for health since 1995

- Population: 23.2 million (12')
- > Area: 36,188 km²
- Population density: 642 per km²
- GDP per capita (est. 13')
 - **□** \$20,930 (exchange rate)
 - □ \$39,767 (PPP)
- Health expenditure (%GDP)
 - □ 6.6% (12')
 - □ \$2,479 per capita (12') (USD PP P)
- Life expectancy:
 - **■** Male: 75.7
 - **□** Female: 81.53

NHI Administrative Framework



National Health Insurance (I)

- National Health Insurance established in 1995
- Mandatory & universal enrolment:
 - ☐ It covers 99% of population, 86% of hospitals, 65% of all hospital bed s, and 91% of doctors
- Comprehensive benefits:
 - ☐ It covers inpatient & outpatient care, laboratory tests, prescription drug s, dental services, Chinese medicine, day care, mental health and preventive medicine
- Three main objectives:
 - Equal access to health care
 - ☐ Quality and efficiency of health care delivery to all
 - ☐ Right to choose providers, treatments or therapies



National Health Insurance (II)

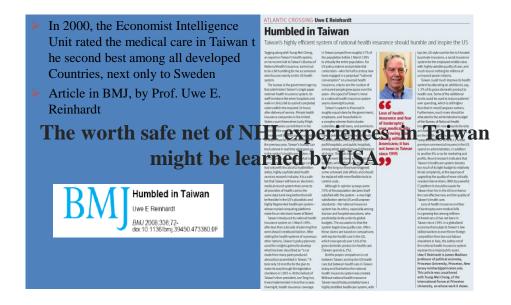
- Financing
 - ☐ Single payer (Monopsony)
 - □ Pay-based premiums shared by employer, employee and government
 □ Premium rate: 5.17% of monthly salary
 - □ Co-payments required for outpatient care, inpatient care and drugs
- Provider payment system
 - National fee-for-service schedule
 - □ Global budget introduced since 2000 to contain expenditures
 - □ DRG, quality-based-payment scheme and RBRVS are introduced to increase providers' financial-risk sharing
- ➤ Healthcare service center
 - Predominantly private (70%)
 - Closed hospital system
 - No gate-keeper system
 - NO service delivery points



Major Achievements of NHI

- Universal coverage
- Easy access
- Affordable cost
- High public satisfication
- Up-to-standard quality

Taiwan NHI Wins International Acclaim



Best Health Care Systems in the World

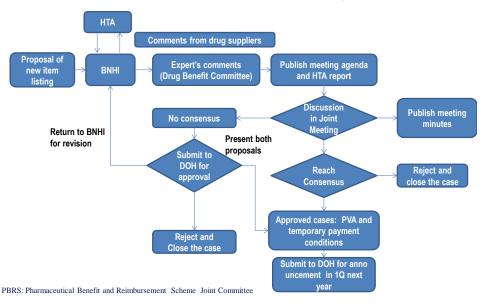


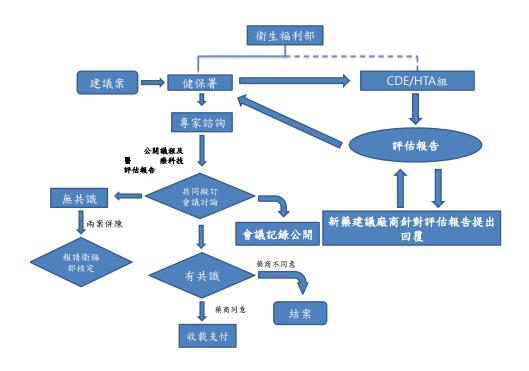
The Taiwanese government pays for all its citizens' health care needs. They were able to cover the needs of the population yet have managed to decrease health care costs. Much credit is given to the rise in the use of smart cards. These smart cards already contain the patient's medical history from birth, making it easy for doctors to diagnose any health issue. This also significantly cuts down time on paperwork, which could be a probable cause of additional costs from medical providers. This system is employment-based, therefore, the elderly and those who can't afford the system are given subsidies.

Health Reform (1st vs 2nd) 一代與二代之差異比較

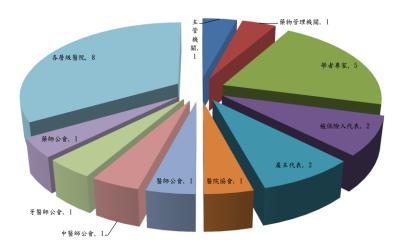
	一代健保 (1 st)	二代健保 (2 nd)
已收載成分品項 (學名藥)	保險人依藥價基準規定核定	先由保險人初核,提共 同擬訂會議報告後生效
新藥 (New Drugs)	藥事小組討論 (DBC, HTA)	提共同擬訂會議討論 (PBRS)
醫療科技評估	96年10月開始委託辦理	101年1月成立國家醫療 科技評估中心籌備辦公 室

Procedure of Formulating PBRS





PBRS Joint Committee 共同擬訂會議代表組成



Patient Empowerment and Educational Initiatives

- A new model of patient care involving self-monitoring and patient initiated follow-up
- An online learning resource to prepare patients and carers to actively engage in research, guideline development, advocacy and media activities
- A new patient decision aid to better inform and involve patients in treatment choices
- Video guides providing advice on living with a rheumatic diseases
- Patient Group support for patients wanting to become involved in guideline development and political committees

European League Against Rheumatism Annual Congress, 2014

Patient's Organization

- Systemic Lupus Erythematosus (SLE)
- Rheumatoid Arthritis (RA)
- Ankylosing Spondylitis (AS)
 - Catastrophic Insurance Card
 - Voice in health care decision making
 - Health reimbursement policy (PBRS)

協助創立之病友團體

- 中華民國思樂醫之友協會
 http://www.sle.org.tw/front/bin/home.phtml
- 中華民國類風溼性關節炎之友協會
 http://www.raag.org.tw/knowra_list.php
- 中華民國僵直性脊椎炎關懷協會 http://www.ascare.org.tw/
- 台北榮民總醫院硬皮病友俱樂部



Treat-to-target in systemic lupus erythematosus: recommendations from an international task force

Ronald F van Vollenhoven, Marta Mosca, George Bertsias, et al.

Ann Rheum Dis 2014 73: 958-967 originally published online April 16, 2014

doi: 10.1136/annrheumdis-2013-205139

Treat-to-Target in Systemic Lupus Erythematosus

Overarching Principles 1.The management of systemic lupus erythematosus(SLE)should be based on shared decisions between the informed patient and her/his physician(s)

- It is not recommended that the treatment in clinically asymptomatic patients be escalated based solely on stable or persistent serological activity.
- 4. Since damage predicts subsequent damage and death, prevention of damage accrual should be a major therapeutic goal in SLE.
- Factors negatively influencing health-related quality of life (HRQOL), such as fatigue, pain and depression should be addressed, in addition to control of disease activity and prevention of damage.
- 6. Early recognition and treatment of renal involvement in lupus patients is strongly recommended.
- For lupus nephritis, following induction therapy, at least 3 years of immunosuppressive maintenance treatment is recommended to optimise outcomes.
- Lupus maintenance treatment should aim for the lowest glucocorticoid dosage needed to control disease, and if possible, glucocorticoids should be withdrawn completely.
- Prevention and treatment of antiphospholipid syndrome (APS)-related morbidity should be a therapeutic goal in SLE; therapeutic recommendations do not differ from those in primary APS.
- 10. Irrespective of the use of other treatments, serious consideration should be given to the use of antimalarials.
- 11. Relevant therapies adjunctive to any immunomodulation should be considered to control comorbidity in SLE patients.

van Vollenhoven RF, et al. Ann Rheum Dis 2014;73:958-967



紅性斑狼瘡(SLE)



臉頰蝴蝶狀紅斑



盤狀狼瘡皮疹



關節炎



漿膜炎

思樂醫記者會(SLE Press)



思樂醫-旅遊聯誼









Recommendations

Treating rheumatoid arthritis to target: recommendations of an international task force



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Ann Rheum Dis 2010;69:631-637 doi:10.1136/ard.2009.123919

Box 1 Recommendations

Overarching principles

A. (A). The treatment of rheumatoid arthritis must be based on a shared decision between patient and rheumatologist.

- B. (B). The primary goal of treating the patient with rheumatoid arthritis is to maximise long-term health-related quality of life through control of symptoms, prevention of structural damage, normalisation of function and social participation.
- C. (C). Abrogation of inflammation is the most important way to achieve these goals.
- D. (D). Treatment to target by measuring disease activity and adjusting therapy accordingly optimises outcomes in rheumatoid arthritis.

RA of Hand Fusiform Swelling



RA of Hand-Deformity



RA of Foot-Deformity



Praradigm: Anti-TNFs

- Biologics
 - -Etanercept · Adalimumab · Golimumab



中華民國類風濕性關節炎之友協會



RA之友協會簡介

各地區醫師、病友座談聯誼會



RA之友協會簡介

醫學講座舉辦遍及全國



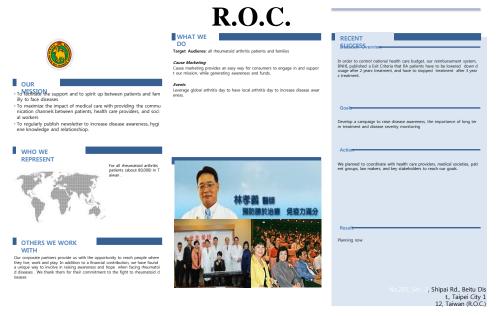
RA之友協會簡介

歲末聯歡





Rheumatoid Arthritis Aid Group of



Mission

- To facilitate the support and to create spirit between patients and family to face diseases
- To maximize the impact of medical care by pro viding communication channels between patie nts, health care providers and social workers
- To regularly publish a newsletter to increase disease awareness, hygiene knowledge and relationship

What We Do

- Target Audience: all RA patients and families
- Cause Marketing: provides an easy way for consumers to engage in and support our mission, while generating aweareness and funds.
- **Events**: leverage global arthritis day to have local arthritis day events to increase disease awareness.

Goals

- Help increase the awareness of the importance and process of biologic treatment, relative infections control and prevention.
- Develop a campaign to raise disease awareness the importance of long term treatment and disease severity monitoring.

Action

- Coordinate with relative patient groups and societies to provide a series of educational lectures of relevant knowledge.
- Plan to coordinate with health care providers, medical societies, patient groups, law makers and key stakeholders to reach our goals.

Situation

- Endemic area for tuberculosis, B and C hepatitis
- Biologics may increase risks of tuberculosis,
 B or C hepatitis reactivation.
- Working with the Department of Health (DOH)
 Health care providers, Taiwan Rheumatology
 Association (TRA)
- BNHI publish the risk management plan (RMP) Guideline to control/ prevent the risks of relative infection risks using screening and educational processes.

Hurdles to Access Treatment -Rheumatoid Arthritis in Taiwan-

- Catastrophic Illness Card (CIC)
- NICE guideline
- Budget Impact
 - 6 biologics + 1 JAK inhibitor
 - 100% reimbursed for RA patients
 - Treat to Target (T2T)
 - Reduction/Withdrawal Policy

Catastrophic Illness Card

Patients with catastrophic diseases represent **3.56%** of Population, who used **27.13%** of NHI medical expenditures. According to an estimate of the NHIA, an average CIC patient spends NT\$3.3 million on treatment each year, which is 131 times the amount of an average person's yearly health insurance payments. The treatment for hemophilia costs the most among all the diseases, said the NHIA.

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http://www.chinapost.com.tw/taiwan/national/national-news/2014/07/12/412217/Time-limit.htm

Management of RA in Original Version

Main Features	Criteria for initiating treatment	
Criteria for	1. Pre-review (pre authorization use)	
initiating treatment	2. File DAS28 score, previous DMARD usage and	
(NICE)	regimen data, photo of swelling joint, and x-ray report for pre-preview	
	3. Monotherapy with methotrexate at least 15 mg weekly	
	4. After 6 months treatment, update DAS28 score, outcome of treatment, side effects, and complications status every 3 months	
	5. Patients should qualify all (a) (b) (c) criteria listed below:	
	a) The American Rheumatism Association 1987 revised criteria for the classification of rheumatoid arthritis	
	b) Ongoing active RA defined as: (i) DAS28>5.1;(ii) Require two DAS score consecutively and at least 1 month interval;	
	c) Failure on DMARDs treatment. At least 2 DMARDs and no significant outcome	
	I. Definition of "adequate" treatment: (i) At least 6 months of DMARD treatment, and meet the standard target dose at least 2 months; (ii) intolerable toxicity occurs	
	II. Definition of treatment efficacy: The DAS28 score drop >1.2 points or DAS28 total score < 3.2	

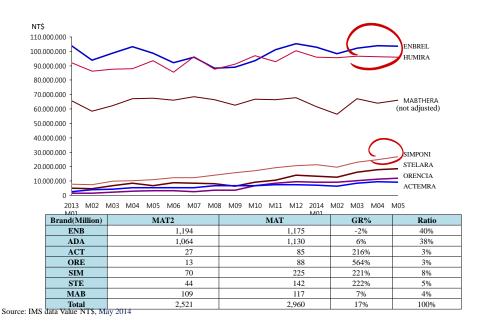
Budget Impact

- Very expensive biologics
- Very strict NICE guideline
- 100% reimbursement
- Treat to target (T2T)
- Dose reduction or withdrawal policy
- Relapse and Re-entry

Trend of RA Patients on Biologics

Year	2011	2012	2013
Biologics eligible patients	4,954	5,858	6,969
Medical Cost Claimed (Million NTD)	1,358	1605	1849
Growth Rate		18.1%	15.2%

Taiwan Inflammation Market Trend



Discontinuation of TNF-Inhibitor Therapy in Remission 退場機制

- Remission defined as DAS28 < 2.6
- Withdrawal of TNF-inhibitor after 6 months of remission (n=21)
- Monthly reassessments thereafter

Conclusion

- 1. TNFi discontinuation in patients in remission of RA was followed by a relapse within 12 months in 75% cases
- 2. Relapsing patients responded well resumption of the same TNFi

Broqc et al. Joint Bone Spine 2009.

Management of RA in Revised Version

退場機制

Main Features	Criteria for tapering treatment		
Criteria for	1. Reducing dosage after 2 years		
tapering treatment	- DAS28≤ 3.2		
(Never	-ESR≤ 25mm/h & CRP ≤ 1mg/dL		
before)	2. Reducing treatment way:		
Taiwan	- Propose appropriate treatment plan for pre-view stage after 2 years		
Taiwan 3. Receiving treatment as same as before during tapering period			
NICE ??	- The DAS28 total score grow >1.2 points or ESR >25mm/h		
	- ESR growth rate >25%		
	Failure on one biologic treatment, shifting to receive the other biologics based on different MOA		
	5. RA flare for temporary consecutive treatment, showing criteria as below:		
	- Consecutively receive 2 DMARDs firstly		
	- DAS28 >1.2 points		

Source: BNHI treatment guideline updated in 2013



The dilemma in the real world

The Dilemma in Clinical Practice

- · Lack of time
 - Insufficient communication → poor understanding → poor compliance → suboptimal disease control
- Cost concern
 - Not a issue to physician and patient under Taiwan reim bursement → suboptimal utilization of medical record
- Treatment target
 - Slightly different with current reimbursement criteria
 - Criteria for dose tapering and discontinuation

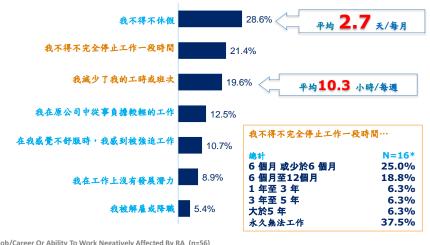


類風濕性關節炎病患生活品質調查 (Quality of Life questionnaire)



類風濕性關節炎透過哪些方式影響工作/職涯或工作 (Influence on Job/career or Ability to Work)

類風溼性關節炎對工作的影響



Base: Job/Career Or Ability To Work Negatively Affected By RA (n=56)

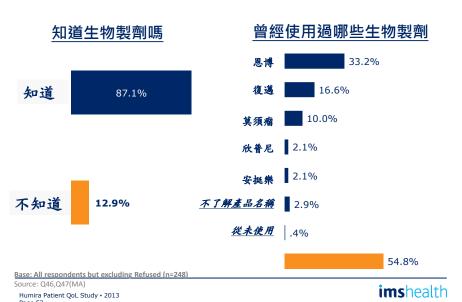
Source: Q41 Humira Patient QoL Study • 2013

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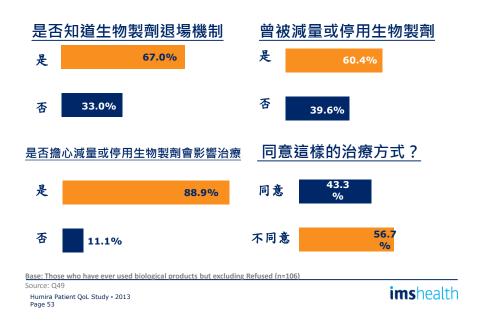
*: Small sample size, for reference only

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大部分類風濕性關節炎病友知道生物製劑; 然而,只有一半的病患曾 經使用過生物製劑 (% RA patients prescribed with biologics)



大多數的病友擔心減量或停用生物製劑的使用,將會影響治療; 有許多病友並不同意這樣的治療方式 (Reduction/Withdrwal)



Evidence of Medicine: Recent publication of trials investigating drug-free remission

imshealth

Recent publication of trials investigating drug-free remission

RRR (Remission induction by Remicade in RA)	Tanaka et al
CIMESTRA	Hetlant et al
Finland early RA cohort	Tiippana-Kinnunen et al
BeSt	Klarenbeek et al
OPTIMA	Emery et al
PRESERVE	Smolen et al

Tanaka Y, et al. Ann Rheum Dis. 2010;69:1286–1291 .Hetland MEVIF สามักการพยเกา ชาม 2010;69:1789–1795 Tiippand มีที่การพิศทาร์ et al. Scand J Rheumatol. 2010;39:12–18 Klarenbeek NB, et al. Ann Rheum Dis. 2011;70:315–319 Emery P, et al. EULAR 2011 Smolen JS, et al. Arthritis Rheum. 2011;63–4041 **ims**health

Recent systemic review/review of RA biologic discontinuation studies

Tanaka et al	Literature overview	 Discontinuation of TNF-i in MTX-IR patients Dose reduction of TNF-i in MTX-IR patients Discontinuation of Abatacept in MTX-IR patients Discontinuation of Tocilizamab in MTX-IR patients Discontinuation of TNF-i in MTX-naïve patients Discontinuation of TNF-i in MTX-naïve patients very early RA patients
Yoshida et al	Systemic Review	9 published articles5 ACR/EULAR meeting abstracts

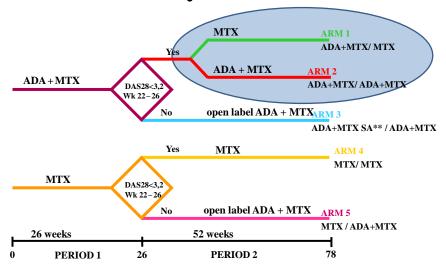
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Benchmarking Studies

- OPTIMA Study
- The PRESERVE Study

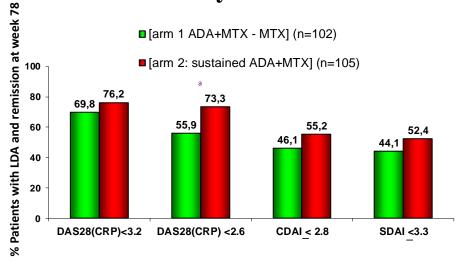


Tapering Biologicals: OPTIMA Study: arm 1 vs arm 2



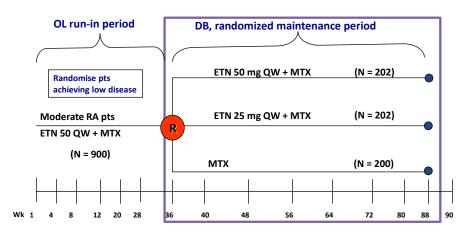
Smolen et al. Lancet 2013.

Tapering Biologicals: OPTIMA Study: arm 1 vs arm 2



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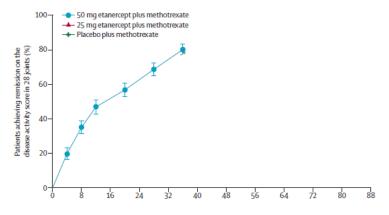
The PRESERVE Study



R = Completers of phase I with DAS28 \leq 3.2 at week 36 and average of \leq 3.2 from week 12 to week 36

Smolen et al. Lancet 2013.

The PRESERVE Study: Results Phase II: Patients in Remission



- Both ETN groups had similar distribution of loss to response
- Both were superior to the MTX group

Smolen et al. Lancet 2013.

Treatment Reduction According to the EULAR Recommendations

Sequence of treatment reduction:

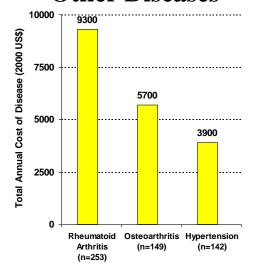
- 1. (Stopping Glucocorticoids)
- 2. Tapering <u>biological DMARDs</u> (#12) especially if this treatment is combined with a DMARD
- 3. Cautious reduction of the DMARDs dose (#13)
 - → As always: shared decision between patient and physician

Duration of full remission

Smolen JS, et al. Ann Rheum Dis 2014;73:492-509.

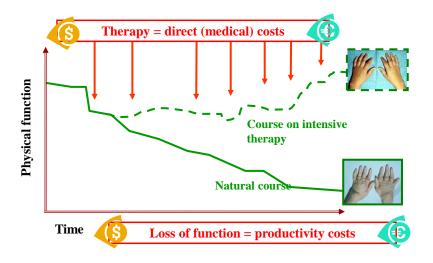
Value of treatment for long term outcomes

Costs of RA Higher than in Other Diseases



Meatzel A et al. Ann Rheum Dis 2004.

The Balance of Direct and Indirect Costs



Conclusion

- Better treatment options might be available to patients timely in spite of strict BNHI treatment guideline
- The social activities encourage RA patient group to get involved in decision making
- · Budget impact on healthcare reform is never ending
- Physicians are playing the crucial role in effectively communicating with patients



