

# DRE-Sanofi Intermediate Training DOC Library

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# Advanced Literature Search and Screening

Overall goal:

- Use DOC Library platform and library services to answer research questions
- Understand Doctor Evidence methodologies and processes

# Objectives

- Understand the methodologies and technologies that power DOC Library
- Search, sort and filter relevant publications quickly and efficiently
- View, rate and annotate, share, and download abstracts and full-text articles
- Conduct advanced research in an Evidence Project by study title, abstract or text
- Request a specific Evidence Project

# What does DRE do?

- **Identify relevant published literature to answer scientific questions and extract data from these sources using proprietary software technologies**
  - Create curated and searchable libraries
  - Create relational databases suitable for analyses
- **Consult with our clients to provide meaningful insights that inform decisions and guide tactics**
  - Structured consulting process
  - Frequent and regular touchpoints with our clients
  - Deliverables include written reports, slide decks and publications

# DRE – Sanofi Library Services

Access studies in DOC Library

Request a targeted literature package

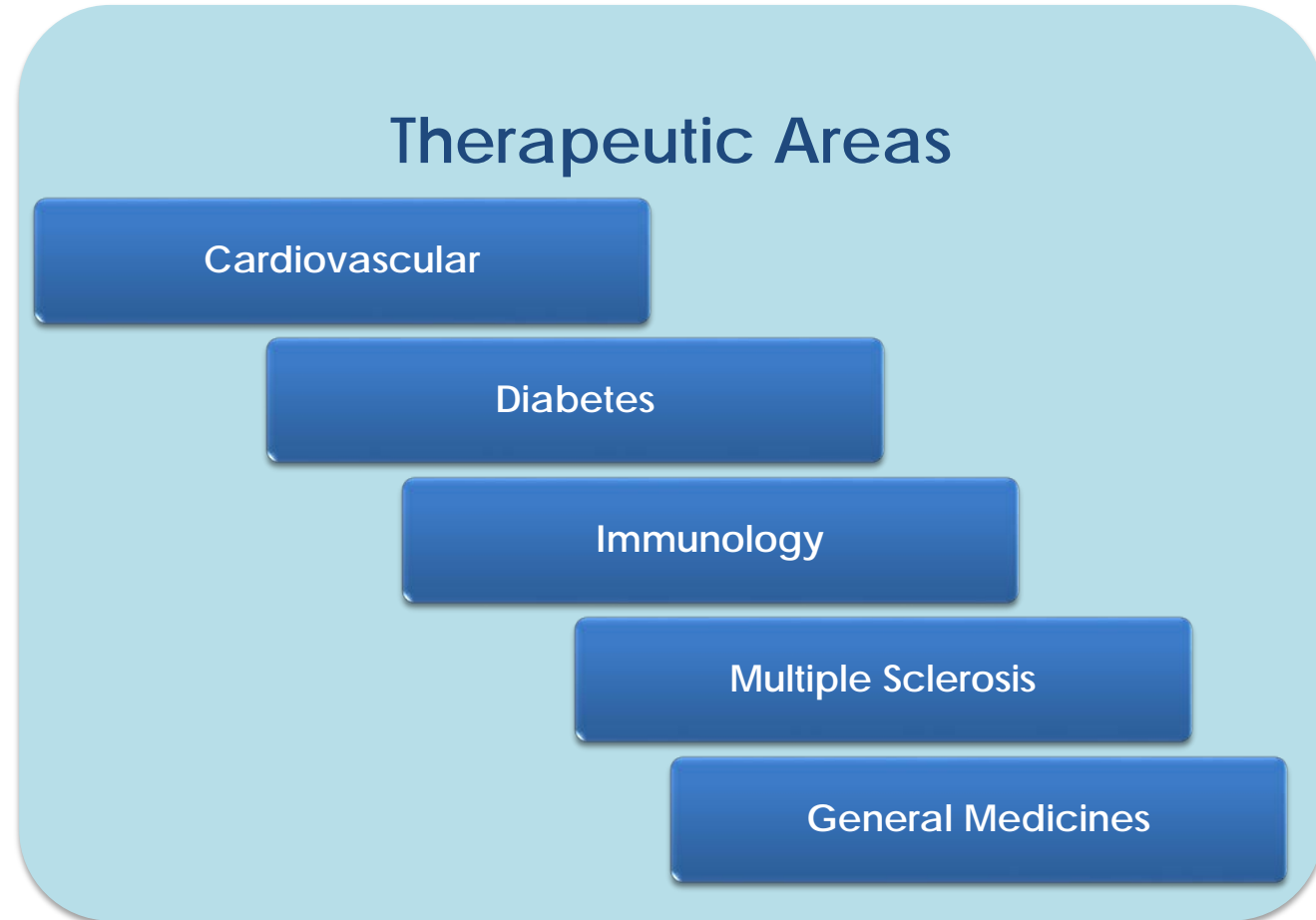
Share literature enterprise-wide across teams and projects

NO COST FOR DOCTOR EVIDENCE SERVICES

# DOC Library

- ✓ 69 Master Libraries
- ✓ 136,140 References

Access DOC Library through  
<https://sanofi.doctorevidence.com>.  
Please note that Chrome is the  
recommended browser.



# Literature Surveillance, Monthly Updates and Summaries

## Early development through launch

- Provide inputs for **protocol development** and **safety / risk management planning**
- Provide information for **evidence development planning**
- Make the most of current research while identifying **evidence gaps**
- Inform planning for **primary research**, e.g., choice of endpoints and comparators
- Determine which **adverse events** might be associated with a product
- Perform burden-of-illness **research** for communicating value
- Identify the most **used methods and data sources** within a therapeutic area
- Identify and synthesis **inputs** for economic modeling
- Estimate **comparative safety and efficacy** of comparators and/or other products
- Track **competitor products** and stay abreast of new **data and coverage decisions**
- Produce materials for inclusion in **value dossiers and HTA submissions**

## Post launch and lifecycle management

- Understand **new indications** in the context of specific commercial, medical and regulatory strategy
- Understand **real-world effectiveness** and surveillance
- **Communicate value** based on ongoing research and new evidence

# DOC™ Library: Features and Processes



# Search and Screening Process

Development of a PICO question to define the Patients, Interventions, Comparators, and Outcomes of interest



Consultations with DRE medical librarians, clinical team and methodologists



A Rapid Intelligence assessment of the available literature to determine project feasibility







The development of a search protocol, which is converted into a unique broad search strategy

# Search Strategy

- The search strategy includes keywords, synonyms, and MeSH terms for each of the concepts represented in the PICO.
- The lead Doctor Evidence Librarian then conducts a broad search of published literature in PubMed, Embase, Cochrane and other pertinent databases.
- Citations are categorized based on client needs and full-text articles are retrieved.
- All full-texts are re-evaluated for eligibility by the Methodology Lead.
- Reliability of the screening is confirmed by both technological and quality assurance processes within the DOC Library environment, overseen by Doctor Evidence's CMO.

# Advanced Technologies to Ensure Retrieval of Relevant Articles

















- ✓ Pattern recognition (i.e., color coding, bolding, etc.) for ability to quickly confirm study design and/or parameters.
- ✓ Keyword recognition: ability to quickly identify the relevant studies by using tools to find relevant terms/phrases in titles, abstracts and full text.
- ✓ Correction and/or re-categorization of studies due to inaccuracies found in MeSH descriptors and PubMed filters.
- ✓ NLP/Machine learning: increasing reliance on technologies that help automate the correct identification and categorization of references.
- ✓ Quality control program to efficiently audit included and excluded references to ensure that search results have maximized retrieval of relevant references and minimized retrieval of any irrelevant references (maximize accuracy).

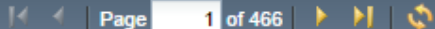
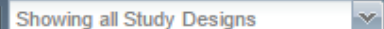
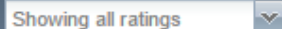
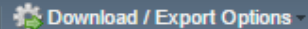
Quick Search:   Search Evidence Project  Search Framed Question  Tip  Advanced Search

Welcome to Doctor Evidence

Studies conducted on DM MASTER (Efficacy/Safety): T2DM (Non-insulin) :: 9585 assigned studies available for review

All References - T2DM (Non-insulin) Abstracts

	DrE ID	Acronym	Authors	Reference Title	Journal	Publication Type	Publication Date	Study Design	Your Rating	Full Text	Abstract	Supp...	Favorites	Sharing	Status
1	951146		Yajima K, Shimad...	"Low dose" metf...	The review of dia...	Journal Article	2004	RCT Head to He...	Not Rated	 Full Text	 Abstract				Assigned
2	1799820		Monnier L., Colet...	"mild dysglycem...		Journal Article	2015								Assigned
3	1059646		Shin DW, Kim SN...	(-)-Catechin pro...	Biochemical phar...	Journal Article	2009 Jan 1								Assigned
4	597672		Kakinuma H, Oi T...	(1S)-1,5-anhydr...	Journal of medici...	Journal Article	2010 Apr 2								Assigned
5	1799968		Chambel P, Marc...	[Characterizatio...	Acta medica port...	Journal Article	2011 Jul-A								Assigned
6	512151		Gitt AK, Bramlag...	[Comorbidity, hy...	Herz	Journal Article	2012 May								Assigned
7	1799985		Andrews M, Soto...	[Effect of metfor...	Revista medica d...	Journal Article	2012 Nov								Assigned
8	1800004		Guelho D, Paiva ...	[Relation betwee...	Acta medica port...	Journal Article	2014 Mar-A								Assigned
9	1800008		Fiorentino TV, Se...	[Tight glycemic c...	Giornale italiano ...	Journal Article	2014 Dec								Assigned
10	289484		Vilhauer EB, Brin...	1-[(3-hydroxy-1...	Journal of medici...	Journal Article	2003 Jun 1								Assigned
11	228069		Knowler WC, Fo...	10-year follow-u...	Lancet	Journal Article	2009 Nov 1								Assigned
12	219995	UKPDS	Holman RR, Pau...	10-year follow-u...	The New Englan...	Journal Article	2008 Oct 9								Assigned
13	1200306		Erdmann E, Hard...	10-Year Observ...	Diabetes, obesity...	Journal Article	2015 Nov 23								Assigned
14	950466		Bérard E, Bonga...	14-Year risk of a...	PloS one	Journal Article	2014	Unassigned	Not Rated		 Abstract				Assigned
15	974271		Monges AM, Pis...	1H nuclear mag...	Fundamental & c...	Journal Article	1991	Unassigned	Not Rated		 Abstract				Assigned
16	259160		Guillausseau PJ,...	24-hour glycemi...	Diabetes & meta...	Journal Article	2001 Apr	Unassigned	Not Rated		 Abstract				Assigned
17	226309		Seufert J, Urouh...	2-year effects of...	Diabetes researc...	Journal Article	2008 Mar	Non-Randomize...	Not Rated		 Abstract				Assigned

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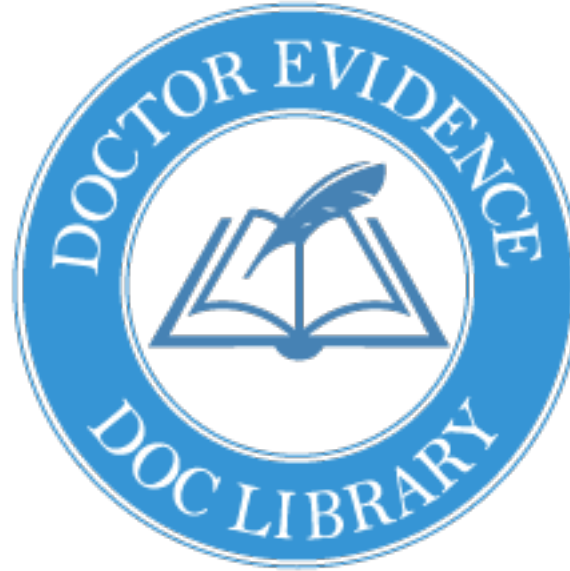
Displaying abstracts 1 - 20 of 9316

DOC Library is a searchable repository which includes:

- the selected literature
- other published sources, such as clinical studies
  - grey literature
  - commentaries
  - other sources of healthcare data

Organized by Framed Questions

# Navigating DOC Library



# Navigating DOC Library

# Demonstration and Activities

# Activities

1. Open the Evidence Projects menu and reorder the libraries by dragging your most relevant library to the top of the list
2. Navigate to the Evidence Package “MS MASTER (Efficacy/Safety): Alzheimer’s Disease” to view the broad master library that contains all Alzheimer’s-related literature
3. Download the PICO specification document to view the search and screening protocol that defined this library
4. Open the “Competitor Agents – RCT” Framed Question to view the reference list of Randomized Controlled Trials

Log in to DOC Library through signing on at  
<https://sanofi.doctorevidence.com>



# Activities


5. Use the 'Advanced Search' feature to find the references published after 2010 that report: MCI OR "mild cognitive impairment"
6. Export the reference list to either Reference Manager (RIS), Excel, or Word document format
7. View an abstract and rate it as Relevant
8. Open the Notes tab of the abstract view and add a new note
9. Share the abstract with [nmorgan@doctorevidence.com](mailto:nmorgan@doctorevidence.com)

Log in to DOC Library through signing on at  
<https://sanofi.doctorevidence.com>


# Initiating a Project

# Requesting a Customized Library Package

<https://reports.doctorevidence.com/pages/Client/ServiceProject.aspx>

 **Sanofi DRE Service Project Initiation**

**Date \***



**Name \***


**Department \***

**Location \***

**Email \***

**Phone # \***

**Requried By Date \***



**Question \***

# Initiating a Project – Additional Contact Info

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# DOC Data Training to follow....

# Appendix

# Types of PICO Questions

## Efficacy and Safety

- Efficacy/safety of an intervention
- Often in comparison to other interventions

## Prognostic

- Likelihood of an outcome based on patient characteristics
- Identify which patients may be at risk for an intervention
- Identify patient populations who may respond favorably to an intervention

## Economic

- Economic impact of a disease or of a health intervention in comparison to other health interventions
- Budget impact or cost-effectiveness

## Epidemiological

- Distribution of health related events
- Incidence
- Prevalence
- Patient characteristics or comorbidities within a certain population



# Examples of Research Questions: Efficacy/Safety

Is it possible for increased platelet aggregation without increased risk of bleeding in patients at risk of secondary stroke who are treated with aspirin and other antiplatelet therapy compared to aspirin alone?

Patient	Intervention	Comparator	Outcome
<ul style="list-style-type: none"><li>• Patients who have had a recent* transient ischemic attack/ischemic stroke, and are</li><li>• contraindicated for anticoagulation therapy**</li></ul> <p>*defined as those randomized within 1 month of event.</p> <p>**defined as history of major bleed while on anticoagulation therapy</p>	<p>Combination of acetylsalicylic acid (ASPIRIN) with another antiplatelet drug:</p> <ul style="list-style-type: none"><li>• Clopidogrel (PLAVIX)</li><li>• Prasugrel (e.g. EFFIENT)</li><li>• Ticagrelor (e.g. BRILINTA)</li><li>• Vorapaxar (e.g. ZONTIVITY)</li></ul>	<ul style="list-style-type: none"><li>• Acetylsalicylic acid (ASPIRIN) monotherapy</li></ul>	<p>Efficacy/effectiveness:</p> <ul style="list-style-type: none"><li>• Atherothrombotic stroke</li></ul> <p>Adverse Events:</p> <ul style="list-style-type: none"><li>• Any</li><li>• Any Severe</li><li>• Any Serious</li><li>• Totals</li><li>• Withdrawals due to AE</li><li>• Specific AEs/Other<ul style="list-style-type: none"><li>◦ Major bleeding</li><li>◦ Major adverse cardiac event</li><li>◦ Mortality</li></ul></li></ul>

# Examples of Research Questions: Prognostic

What are the predictors of (re)/hospitalization or mortality in inpatients and outpatients with HF, including biomarkers for prediction of these outcomes?

Patient	Intervention	Comparator	Outcome
<ul style="list-style-type: none"><li>• Patients with heart failure</li></ul>	<ul style="list-style-type: none"><li>• N/A</li></ul>	<ul style="list-style-type: none"><li>• N/A</li></ul>	<ul style="list-style-type: none"><li>• Predictors for (re)/hospitalization or mortality</li><li>• Symptoms and signs</li><li>• Swelling or edema</li><li>• Dyspnea/orthopnea</li><li>• Worsening of both as reported by patients</li><li>• Signs</li><li>• Edema/signs of fluid retention</li><li>• Increase in body weight &gt; 1kg/day</li><li>• Pulmonary rales</li><li>• Biomarkers: BNP and NT proBNP</li><li>• Change in NYHA Class</li><li>• Renal function, creatinine/eGFR</li><li>• Previous events</li><li>• Previous hospitalization</li><li>• Rate of hospitalization</li><li>• ER visits without hospitalization</li></ul>

# Examples of Research Questions: Economic

What is the effectiveness and value of dupilumab for the treatment of mild-to-moderate atopic dermatitis.

Patient	Intervention	Comparator	Outcome
<ul style="list-style-type: none"><li>•Adults (<math>\geq 18</math> years) with moderate-to-severe atopic dermatitis inadequately controlled with topical therapy</li></ul>	<ul style="list-style-type: none"><li>•Dupilumab</li></ul>	<ul style="list-style-type: none"><li>•Emollient therapy</li><li>•Topical corticosteroids (Including but not limited to): Betamethasone valerate, Betamethasone dipropionat Desoximetasone, Fluocinolone acetonide, Fluticasone propionate, Hydrocortisone, Mometasone furoate, Triamcinolone acetonide, Clobetasone butyrate, Methylprednisolone aceponate, Diflucortolone valerate</li><li>•Topical calcineurin inhibitors: tacrolimus, pimecrolimus</li><li>•Placebo</li><li>•Phototherapy (Including but not limited to): narrowband ultraviolet B (UVB or UV-B or NBUVB – 311–313 nm), Broadband UVB phototherapy, PUVA (Psoralen and UVA), UV-A, UVA1, high-dose UVA1 (340–400 nm),</li><li>•Cyclosporin</li><li>•Combinations of any of the above</li></ul>	<ul style="list-style-type: none"><li>•Efficacy/effectiveness:<ul style="list-style-type: none"><li>◦Investigator's Static Global Assessment (ISGA)</li><li>◦Investigator's Global Assessment (IGA)</li><li>◦Eczema Area and Severity Index (EASI): 50, 75, 90</li><li>◦Scoring Atopic Dermatitis (SCORAD) score</li></ul></li><li>•Adverse Events:<ul style="list-style-type: none"><li>◦Any</li><li>◦Any Severe</li><li>◦Any Serious</li><li>◦Totals</li><li>◦Withdrawals due to AE</li><li>◦Specific AEs/Other</li></ul></li></ul>

# Examples of Research Questions: Epidemiologic

What is the published literature explicitly examining the prevalence and/or incidence of MS?

Patient	Intervention	Comparator	Outcome
<ul style="list-style-type: none"><li>Any population based on geography, socioeconomic status, etc.</li></ul>	<ul style="list-style-type: none"><li>N/A</li></ul>	<ul style="list-style-type: none"><li>N/A</li></ul>	<ul style="list-style-type: none"><li>Incidence/prevalence of MS</li></ul>