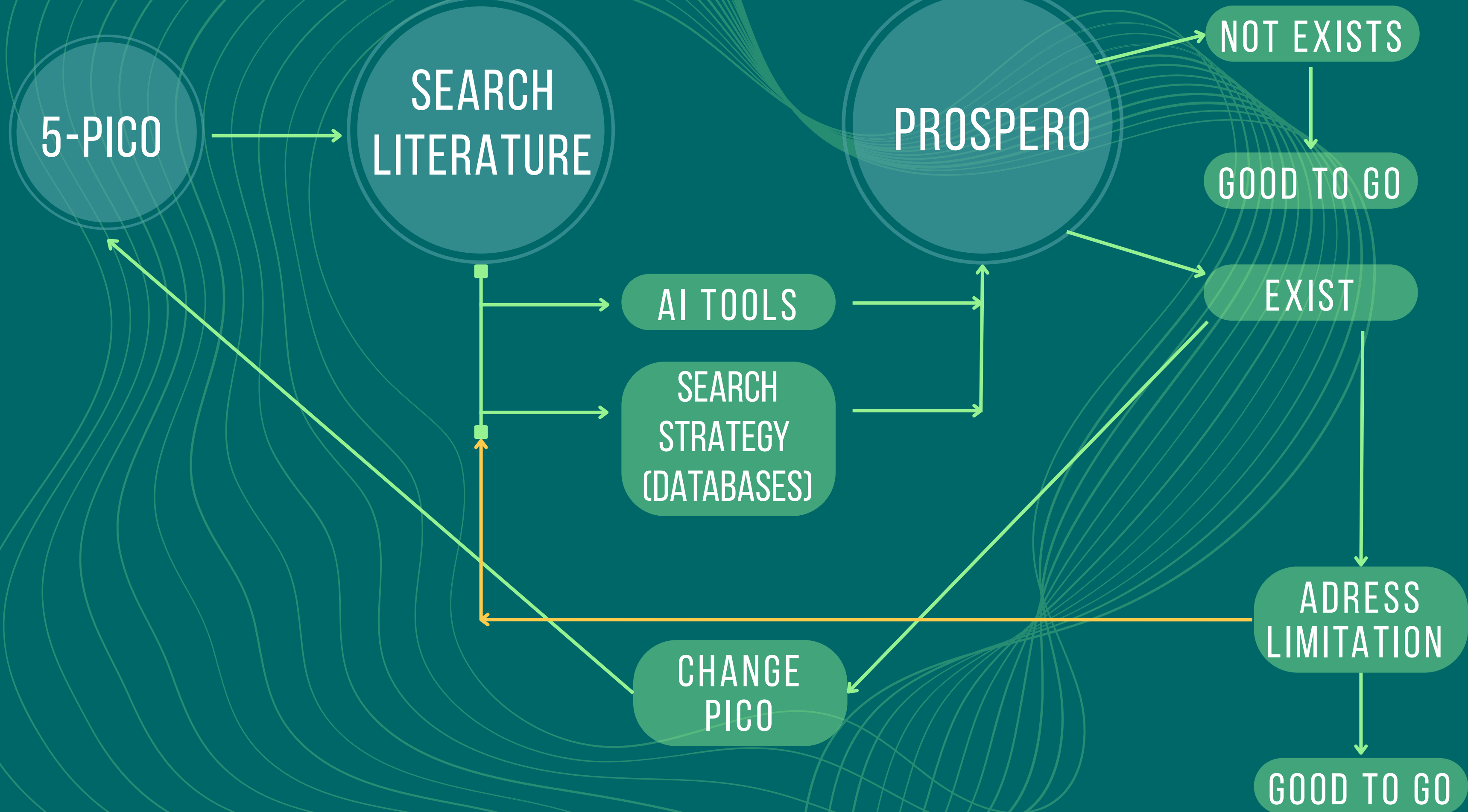


MASTERING THE SYSTEMATIC REVIEW DAY - 3 WORKSHOP

**WHAT WE HAVE
DONE TILL NOW?**



SEARCH STRING

["P1" OR "P2" OR "P3"]

AND

["I1" OR "I2" OR "I3"]

AND

["C1" OR "C2" OR "C3"]

AND

["O1" OR "O2" OR "O3"])

ZOTERO

ISSUES YOU MIGHT HAVE ENCOUNTERED

- **TOO MUCH LITERATURE - TIAB , IRRELEVANT KEYWORDS, PROPER BRACKETS AND BOOLEANS.**
- **VERY LESS LITERATURE - SEARCH STRATEGY, PICO**
- **PROTOCOL LIMITATION ADDRESSING**
- **CROSS PLATFORM SEARCH STRINGS AND ERRORS -**
- **AI ERRORS -**



TODAYS TARGET

SCREENING MASTERY: FROM CHAOS TO CLARITY

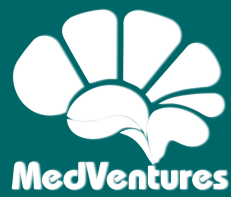
**1. QUICK RECAP: PRISMA FLOW &
ELIGIBILITY CRITERIA**

**2. FUN ACTIVITY: "THE SCREENING
OLYMPICS" (45 MINS)**

3. RAYYAN.AI

4. GET TO KNOW YOUR RESEARCH.

**5. DO OR DIE HOMEWORK (DEADLINE
TOMORROW)**



PRISMA - THE DEEP DIVE IN

[HTTPS://WWW.PRISMA-STATEMENT.ORG/](https://www.prisma-statement.org/)

WHAT IS PRISMA CHECKLIST AND PRISMA FLOW DIAGRAM?



**LET'S ACTUALLY NOW
SEE THE PRISMA STEPS.**

**PRISMA CHECKLIST UPLOADED IN
YOUR PORTAL.**

**10
Mins**

ASSESSMENT ALERT TOMORROW - ON PRISMA EXTENDED CHECKLIST

**HOW DO WE REPRESENT
PRISMA IN OUR PAPER?**

**ANSWER IS PRISMA FLOW
CHART.**

CHART DEPENDS ON TYPE OF SR



PRISMA FLOW CHART MAKER

**[HTTPS://ESTECH.SHINYAPPS.IO/PRISMA_FLO
WDIAGRAM/](https://estech.shinyapps.io/prisma_flowdiagram/)**

AND EXPLANATION.

PRISMA FLOW CHART DIAGRAM PHASES

IDENTIFICATION → SCREENING → ELIGIBILITY → INCLUDED



PRISMA FLOW CHART MAKER

1. Main Options (Selection Criteria)

Previous studies

- Meaning: Whether you included prior systematic reviews on your topic.
- "Not Included" → You excluded existing reviews (focusing only on primary studies).

Other searches for studies

- Meaning: Additional methods like hand-searching journals, contacting experts, or checking reference lists.
- "Not Included" → You relied only on database/register searches.

Individual databases

- Meaning: Whether you searched academic databases (e.g., PubMed, Embase).
- "Included" → You used these (details appear under Specific Database Results).

Individual registers

- Meaning: Whether you searched trial registries (e.g., ClinicalTrials.gov, PROSPERO).
- "Not Included" → You skipped registries (common if focusing only on published literature).



PRISMA FLOW CHART MAKER

2. Identification Phase

Databases

- Meaning: Total records from academic databases before deduplication.

Registers

- Meaning: Records from trial registries.

Specific Database Results

- Example: "PubMed: 500, Embase: 300, Scopus: 200"
 - Lists records per database (transparency).

Specific Register Results

- Example: "ClinicalTrials.gov: 50, WHO ICTRP: 30"
 - Only shown if Individual registers = Included.

Duplicates removed

Automatically excluded (n=0)

- Meaning: Records removed by tools/filters (e.g., language, publication type).

Other exclusions (n=0)

- Meaning: Records excluded manually pre-screening (e.g., obvious irrelevance).



PRISMA FLOW CHART MAKER

3. Screening Phase

Records screened

- Meaning: Titles/abstracts assessed for eligibility.

Records excluded

- Meaning: Records removed during screening (e.g., wrong population/intervention).

Reports sought (LAST THING TO DELETE)(REQUESTED FOR ARTICLE)

- Meaning: Full-text articles requested for review.

Reports not retrieved

- Meaning: Full texts unavailable (e.g., paywalled, unpublished).

Reports assessed

- Meaning: Full texts evaluated against inclusion criteria.

Reports excluded

- Example reasons:
 - *Reason1: Wrong study design (n=20)*
 - *Reason2: Incomplete data (n=15)*
 - *Reason3: Non-English language (n=5)*



PRISMA FLOW CHART MAKER

- **FREE FULL TEXT JUGAD**
- **SCI-HUB**
- <https://sci-hub.se/>



PRISMA FLOW CHART MAKER

4. Included Studies

New studies

- Meaning: Unique primary studies included in the review.

New reports

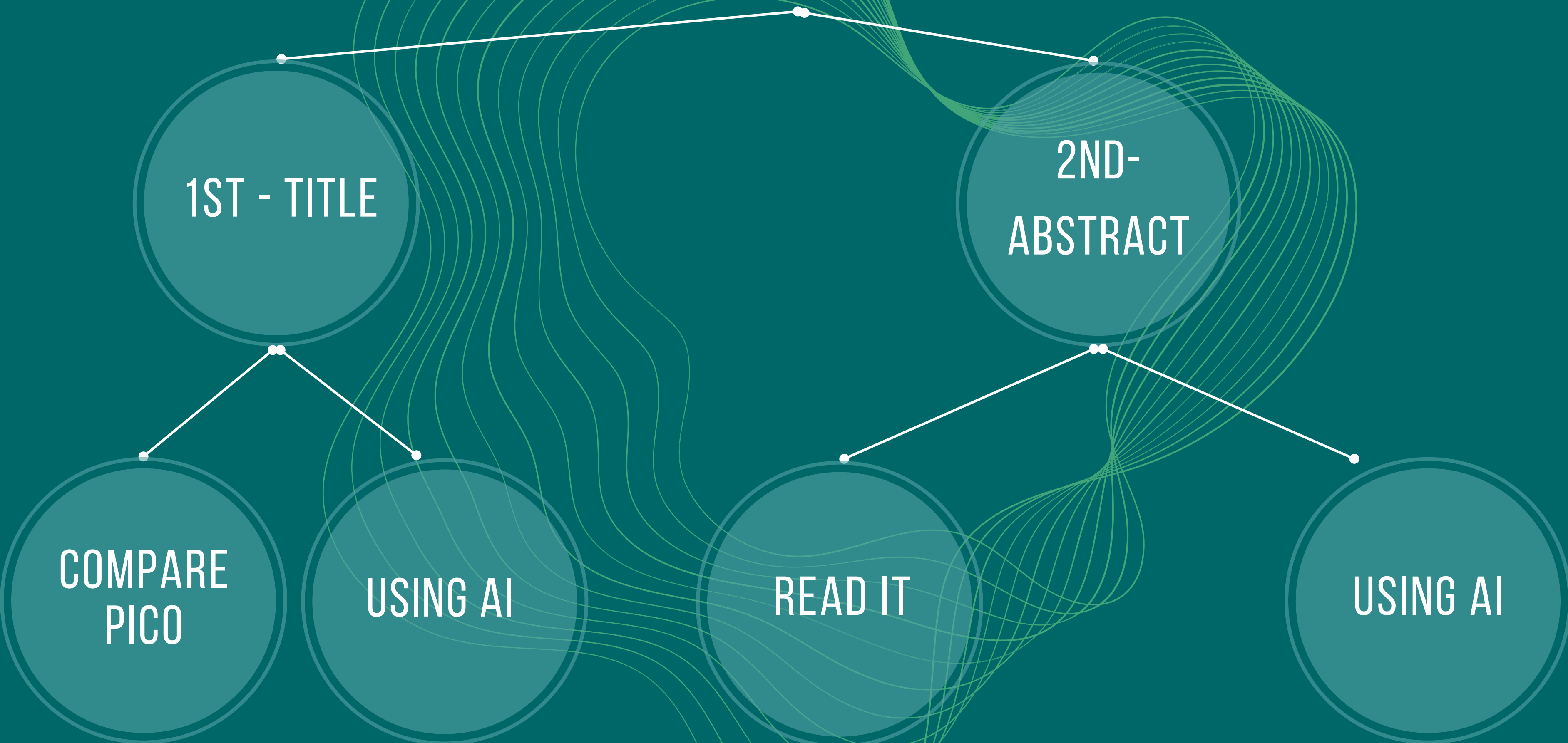
- Meaning: Additional publications of the same study (e.g., conference + journal paper).

PRIMARY SCREENING

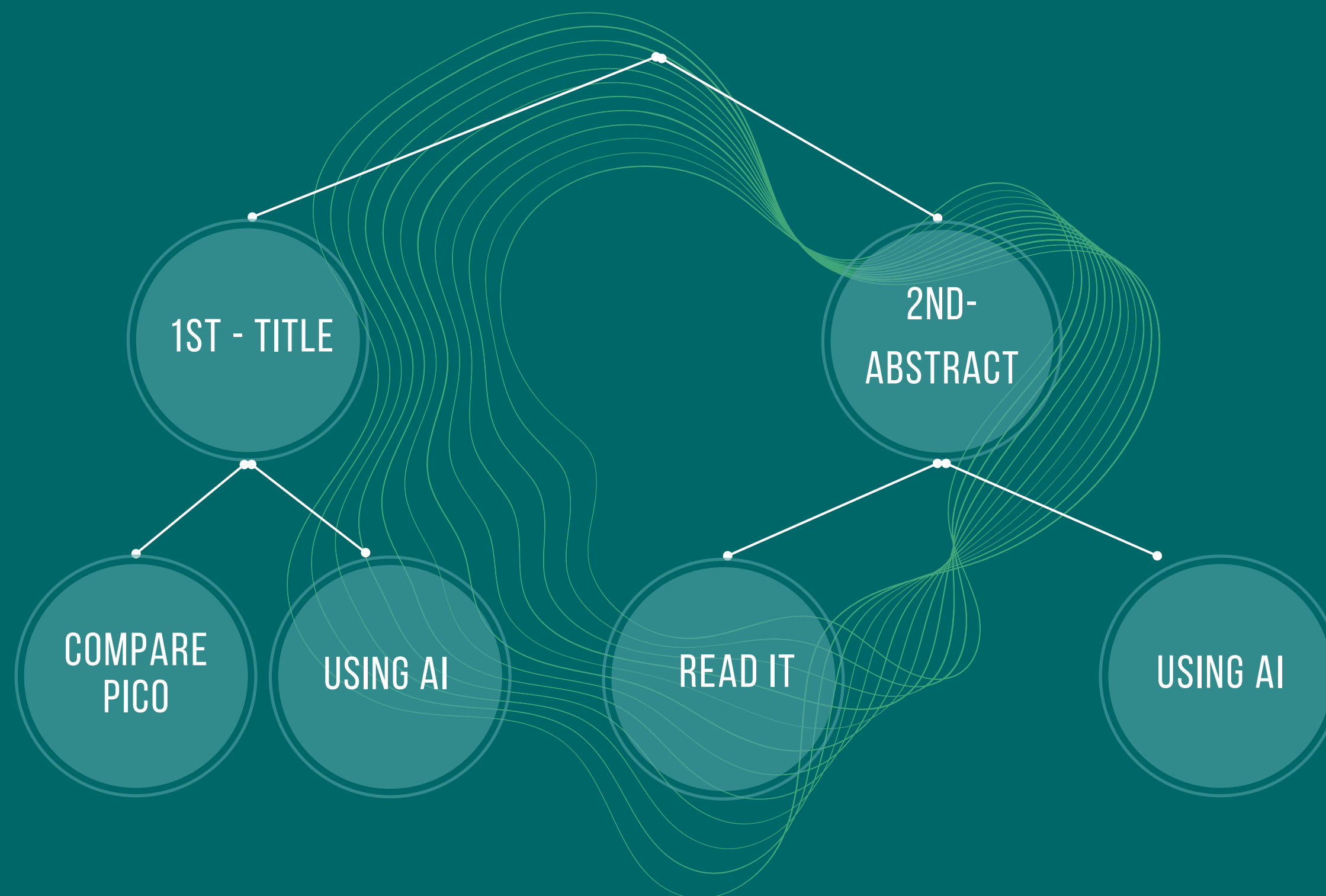
BEFORE SCREENING-

- **DUPLICATE PAPERS**
VIA ZOTERO / RAYYAN
- **FULL TEXT ARTICLES (VIA ZOTERO ONLY)**
- **FILTERS (SHOULD BE DONE DURING SEARCH STRATEGY)**
- **SCIENCE DIRECT?**

PRIMARY SCREENING



MASTER A TOOL WHICH CAN DO ALL OF THIS FOR YOU?





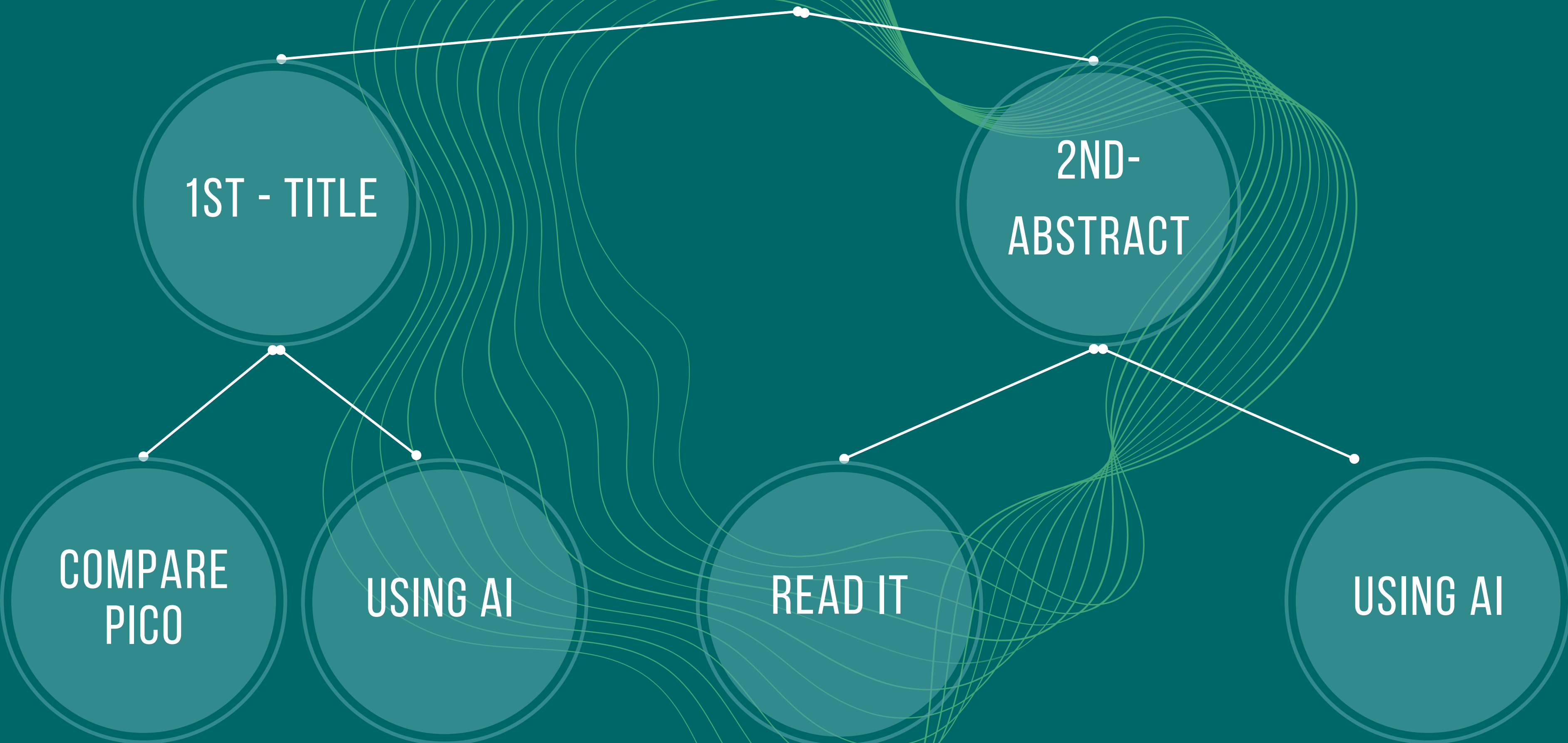
RAYYAN.AI

ELICIT.COM

**BUT WE ARE NOT LAZY
ENOUGH TO USE ONLY
AUTOMATED TOOLS**



PRIMARY SCREENING



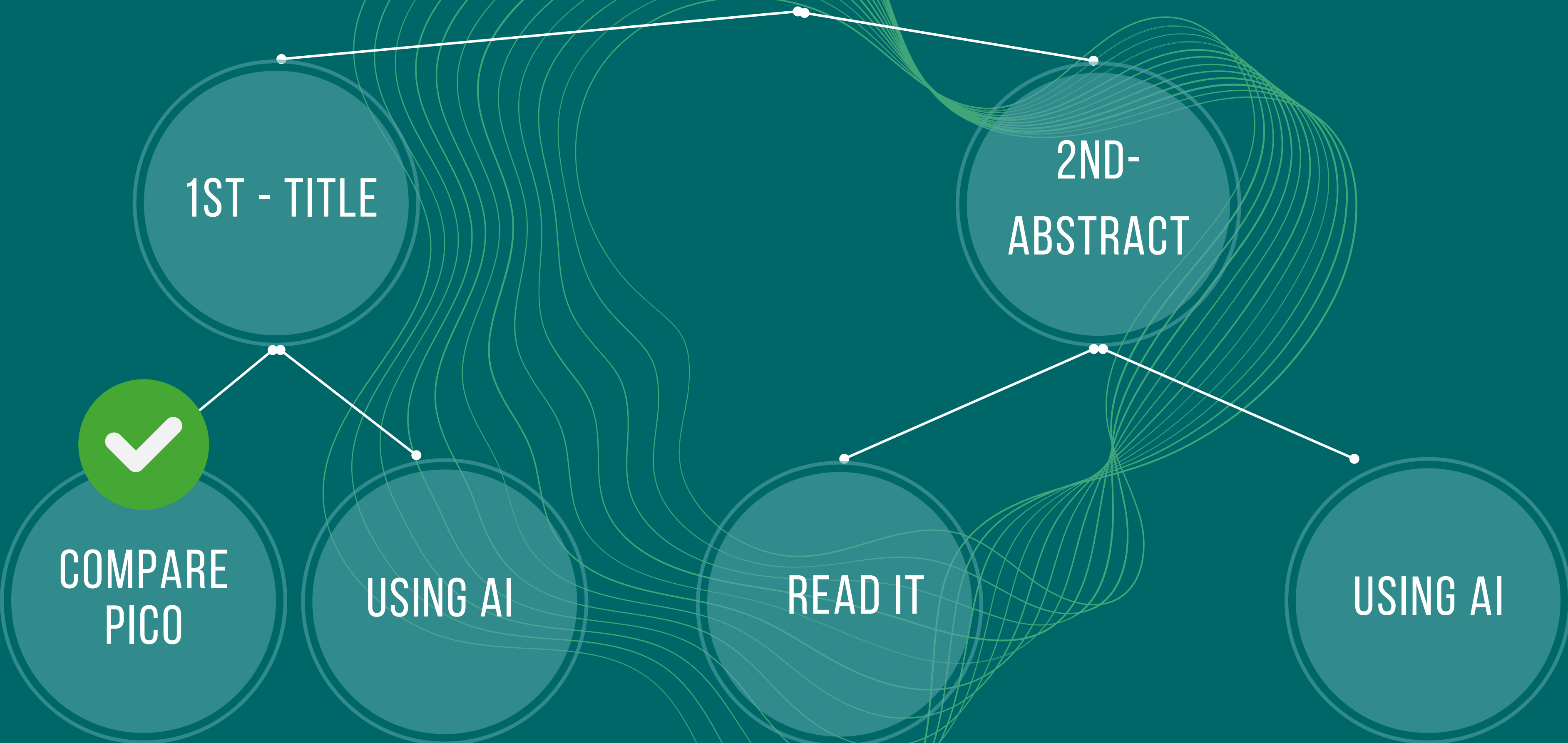
COMPARE PICO -

- BREAKDOWN THE LITERATURES PICO IN P,I,C,O FRAGMANETS AND COMPARE WITH YOUR OWN PICO

QUESTION - WHAT IF ONE OF THE P,I,C,O IS MISSING AND OTHERS ARE MATCHING?

ANSWER - CONSIDER AND TAKE THAT PAPER TO NEXT STEP.

PRIMARY SCREENING



USING AI

AI PROMPT -

ASSUME YOU ARE AN EXPERT RESEARCH ARTICLE SCREENER . THIS IS MY PICO QUESTION -----

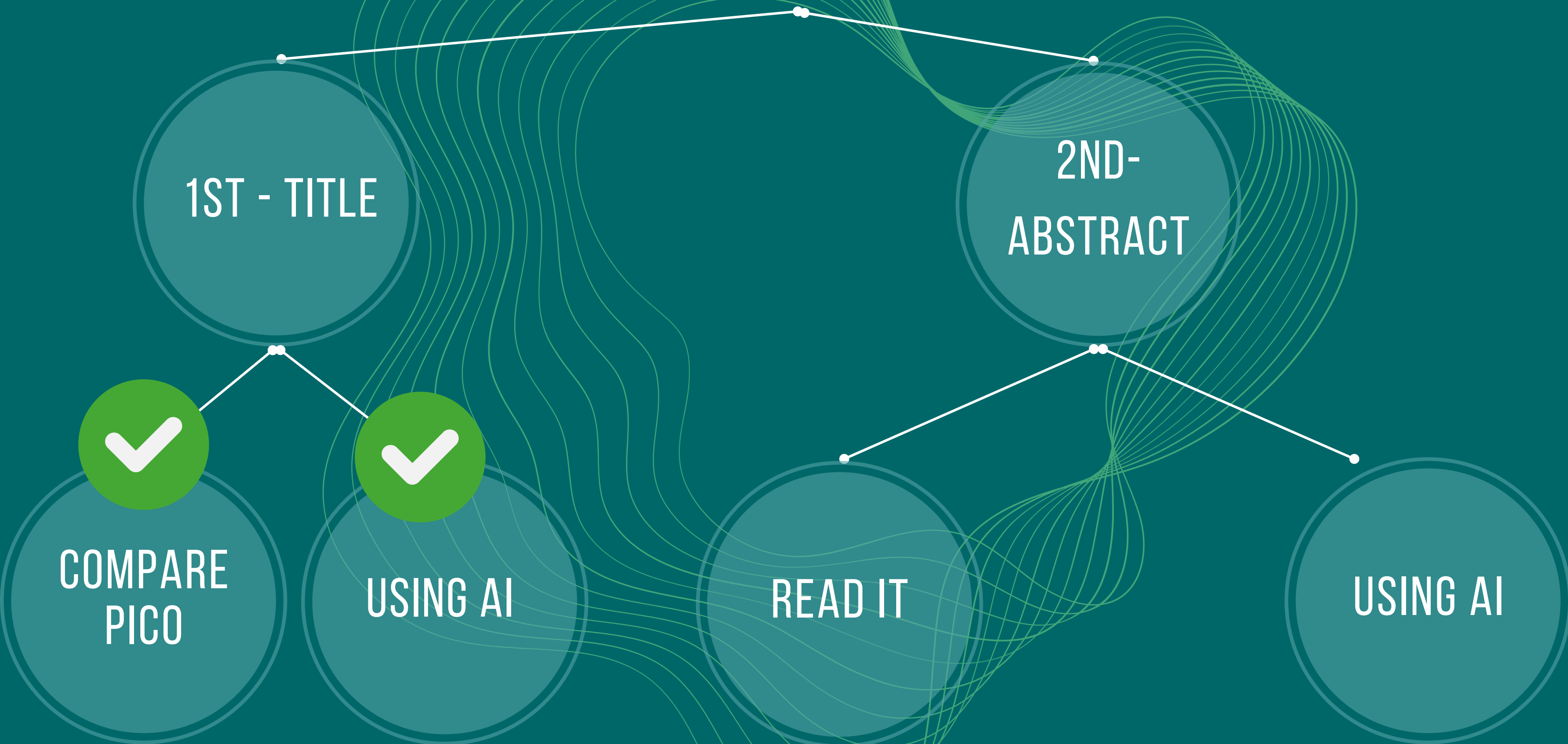
AND FOLLOWING ARE THE TITTLES OF RELEVANT LITERATURE FOUND BY ME ON WEB .

1)

2).....

HELP ME SCREEN THEM BY ONLY TITLE . REWRITE ALL TITLES WHICH I SHOULD INCLUDE IN MY STUDY AND IF ANY ARTICLE EXCLUDED BY TITLE GIVE REASON FOR EACH

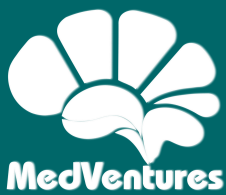
PRIMARY SCREENING



BY ABSTRACT -

READ IT





SCREEN BY ABSTRACT -

USE THE PICOS FRAMEWORK (POPULATION, INTERVENTION, COMPARISON, OUTCOME, STUDY DESIGN) TO GUIDE SCREENING:

Section	What to Look For	Example Screening Questions
1. Population	<ul style="list-style-type: none">• Target group (age, gender, condition)• Sample size	<i>Does this study include adults with Type 2 diabetes?</i>
2. Intervention	<ul style="list-style-type: none">• Treatment/exposure tested• Dosage/duration (if applicable)	<i>Is the intervention a low-carb diet?</i>
3. Comparison	<ul style="list-style-type: none">• Control group (placebo, standard care)	<i>Is there a comparator (e.g., high-carb diet)?</i>
4. Outcomes	<ul style="list-style-type: none">• Primary/secondary endpoints• Measured variables (e.g., HbA1c, mortality)	<i>Does it report weight loss or glycemic control?</i>
5. Study Design	<ul style="list-style-type: none">• RCT, cohort, case-control, etc.• Follow-up period	<i>Is this a randomized controlled trial (RCT)?</i>



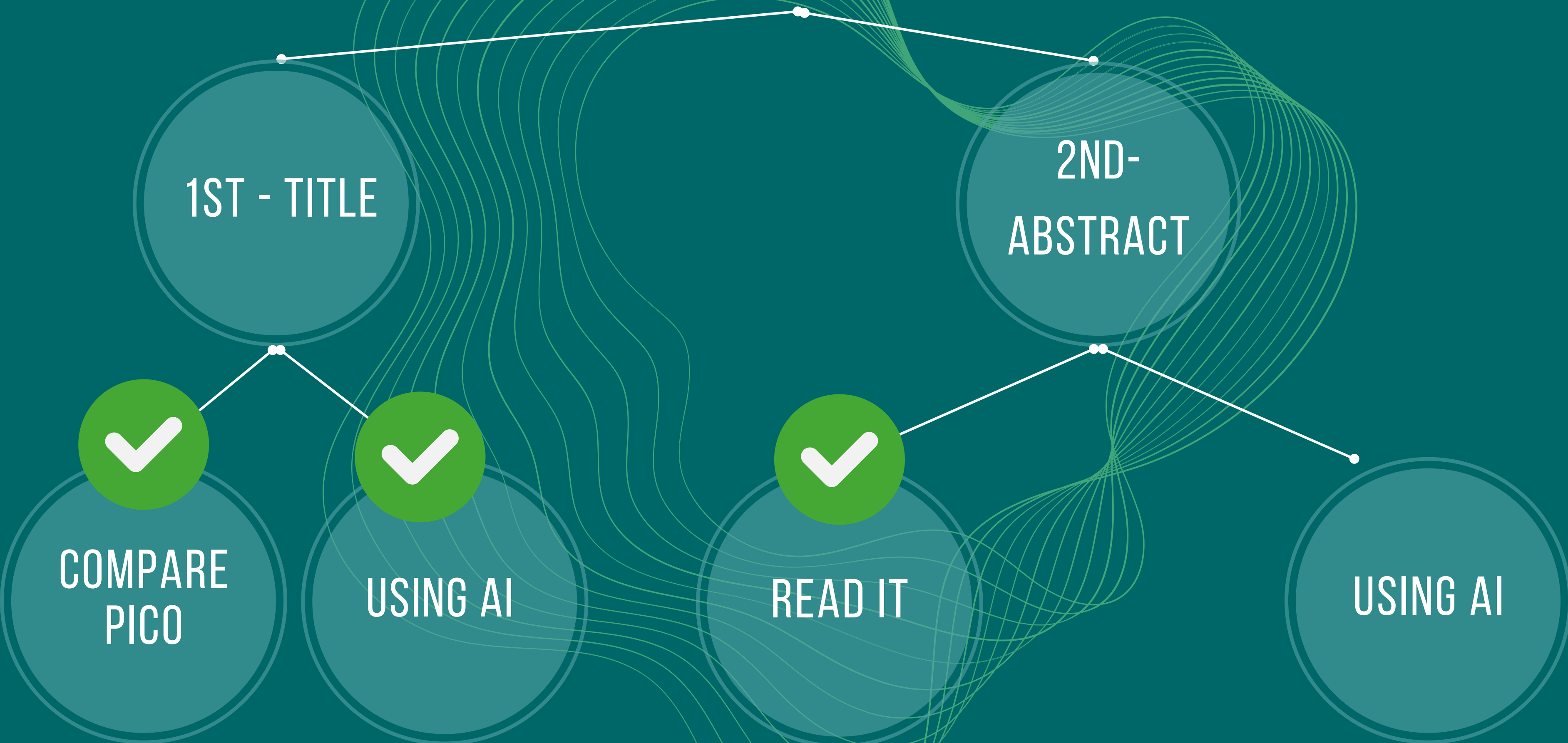
SCREEN BY ABSTRACT -

RED FLAGS FOR EXCLUSION

REJECT ABSTRACTS THAT:

- LACK KEY PICOS ELEMENTS (E.G., NO CONTROL GROUP, UNDEFINED POPULATION).
- USE INELIGIBLE STUDY DESIGNS (E.G., REVIEW ARTICLES IF YOU NEED PRIMARY DATA).
- REPORT IRRELEVANT OUTCOMES (E.G., STUDYING "QUALITY OF LIFE" WHEN YOU NEED "MORTALITY").
- INCLUDE WRONG SETTINGS (E.G., ANIMAL STUDIES FOR HUMAN HEALTH REVIEWS).

PRIMARY SCREENING



ABSTRACT SCREENING USING AI

AI PROMPT -

“ASSUME YOU ARE AN EXPERT RESEARCH ARTICLE SCREENER . THIS IS MY PICO
QUESTION -----

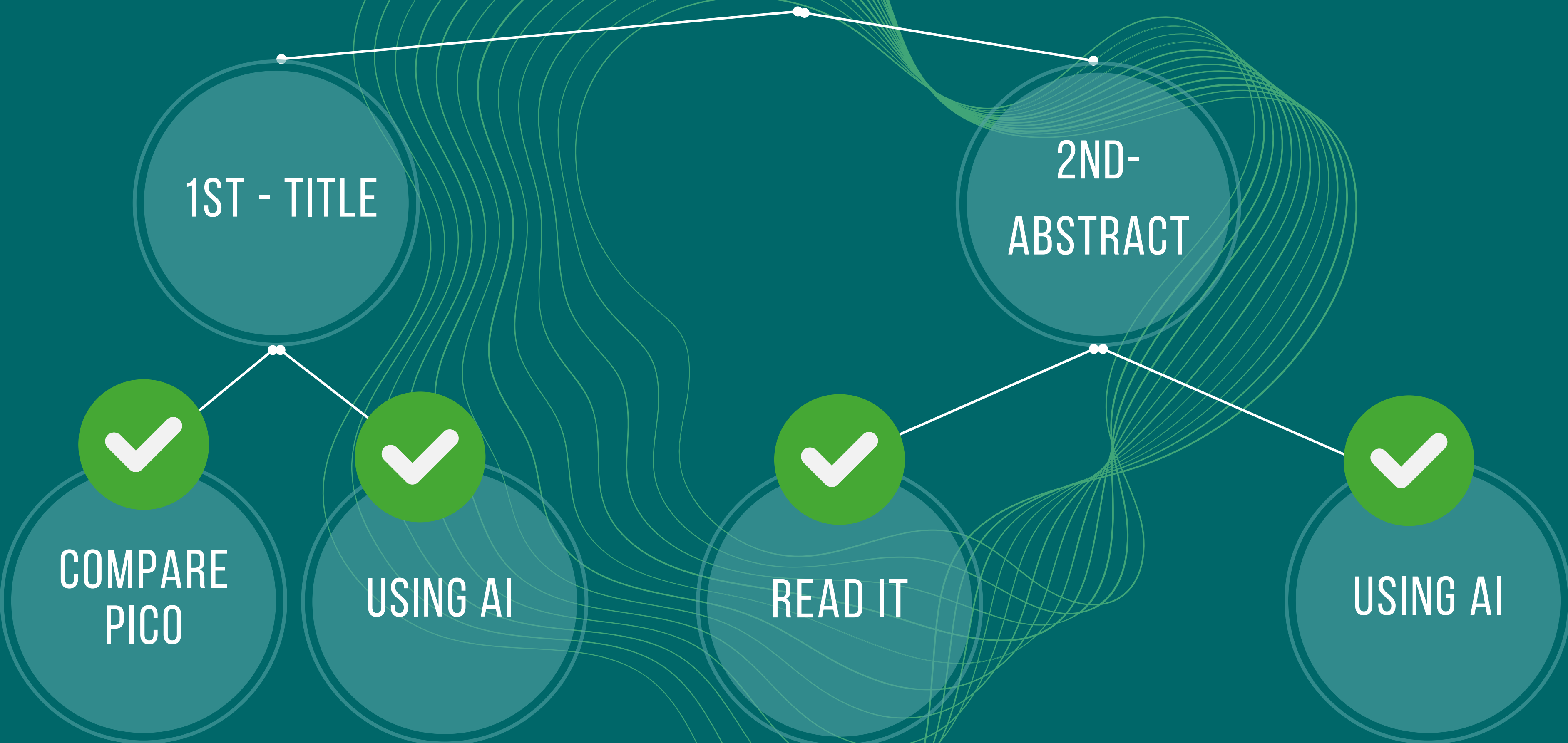
AND FOLLOWING IS THE ABSTRACT OF ONE OF THE PAPER FROM MY SEARCH LITERATURE

.....
HELP ME SCREEN BY ABSTRACT.

TELL ME IF I SHOULD INCLUDE OR EXCLUDE THIS STUDY ..AND TELL ME THE SAME FOR EACH ABSTRACT I
WILL PASTE AFTER THIS PROMPT.”

KEEP PASTING ABSTRACTS FROM DIFFERENT STUDIES ONE BY ONE

PRIMARY SCREENING





SCREENING OLYMPICS AND PRISMA FLOW CHART GROUP ACTIVITY

SAMPLE SCREENING

1. DEVICE ALLOCATION

- ZOTERO
- AI PROMPT AND PPT
- PRISMA FLOW CHART
- RAYYAN.AI

2
Mins

ZOTERO - HOW TO IMPORT AND EXPORT?

SAMPLE SCREENING

PICO Question:

"In Parkinson's disease patients (P), does deep brain stimulation (DBS) (I) outperform standard drug therapy (C) in improving motor symptoms (O)?"

Brief Context:

Compares surgical (DBS) vs. medication treatment for Parkinson's motor control, focusing on tremors, stiffness, and slowness. Relevant for advanced PD cases where drugs lose effectiveness.

Search Keywords:

- P: "Parkinson's disease", "PD"
- I: "Deep brain stimulation", "DBS"
- C: "Levodopa", "dopamine agonists"
- O: "Motor symptoms", "UPDRS"

5
Mins



SAMPLE SCREENING

WHAT IS DBS ?

WHAT IS STANDARD DRUG THERAPY IN THIS CONTEXT..... ETC?

**5
Mins**

SAMPLE SCREENING

1. DOWNLOAD THE DBS-PARKINSONS FILE. IMPORT IN YOUR ZOTERO NEW LIBRARY PLUD DEMONSTRATION
2. DO IDENTIFICATIONS STEPS - LANGUAGE, DUPLICATES, TOTALLY IRRELEVANT STUDIES, PUBLICATION YEAR
3. START TITLE SCREENING -
4. START ABSTRACT SCREENING -
5. PARALLAY MAKE FLOW CHART

5
Mins

SAMPLE SCREENING

1. DOWNLOAD THE DBS-PARKINSONS FILE. IMPORT IN YOUR ZOTERO NEW LIBRARY
2. DO IDENTIFICATIONS STEPS - LANGUAGE (IN ZOTERO)
3. DUPLICATES, TOTALLY IRRELEVANT STUDIES (RAYYAN), PUBLICATION YEAR (SEARCH STRATEGY)
4. START TITLE SCREENING -
5. START ABSTRACT SCREENING -
6. PARALLAY MAKE FLOW CHART

5
Mins



SAMPLE SCREENING

**KEEP A NOTE OF IT IF
YOU REMOVED ANY
PAPER AND FOR
WHAT REASON**



ZOTERO, RYYAN AND PRISMA FLOW CHART(HAND IN HAND)

TWO TYPES OF EXPORT

- **CSV – GOOD FOR BULK COPY, PASTE**
- **BIBETEX – GOOD TO UPLOAD ON RYYAN**

5

Mins



SAMPLE SCREENING

DONE WITH ZOTERO



ZOTERO, RYRYAN AND PRISMA FLOW CHART(HAND IN HAND)

1. Main Options (Selection Criteria)

Previous studies

- INCLUDED

Other searches for studies

- NOT INCLUDED

Individual databases

- INCLUDED

Individual registers

- INCLUDED

3
Mins



PRISMA FLOW CHART MAKER

2. Identification Phase

Databases

- n=2

Registers

- n=0

Specific Database Results

- PUBMED – 23
- GOOGLE SCHOLAR – 9

Specific Register Results

- n=0

Duplicates removed (FIND OUT YOURSELF) BY RYYAN

Automatically excluded (DO IT YOURSELF)

Other exclusions (DO IT)

5
Mins



ZOTERO, RYRYAN AND PRISMA FLOW CHART(HAND IN HAND)

RYRYAN.AI

SIGN UP FOR FREE

**2
Mins**



RAYYAN

- TITLE, DESCRIPTION
- UPLOAD YOUR PAPERS DATA
- ADD EMAILS IN COLLABORATION (ACCES TYPE – COLLABORATOR)
- DUPLICATES
- COLLABRATIVE SCREENING
- DOUBLE BLIND



ZOTERO, RYRYAN AND PRISMA FLOW CHART(HAND IN HAND)

**RAYRYAN.AI AND NEXT STEP
DEMONSTRATION**

SAMPLE SCREENING

1. DOWNLOAD THE DBS-PARKINSONS FILE. IMPORT IN YOUR ZOTERO NEW LIBRARY
2. DO IDENTIFICATIONS STEPS - LANGUAGE (IN ZOTERO)
3. DUPLICATES (RAYYAN), PUBLICATION YEAR, STUDY TYPES - (SEARCH STRATEGY)
4. START TITLE SCREENING -
5. START ABSTRACT SCREENING -
6. PARALLAY MAKE FLOW CHART

5
Mins



RAYYAN

- TITLE, DESCRIPTION
- UPLOAD YOUR PAPERS DATA
- ADD EMAILS IN COLLABORATION (ACCES TYPE – COLLABORATOR)
- DUPLICATES
- COLLABRATIVE SCREENING
- DOUBLE BLIND



PRISMA FLOW CHART MAKER

3. Screening Phase

Records screened

- **Meaning:** Titles/abstracts assessed for eligibility.

Records excluded

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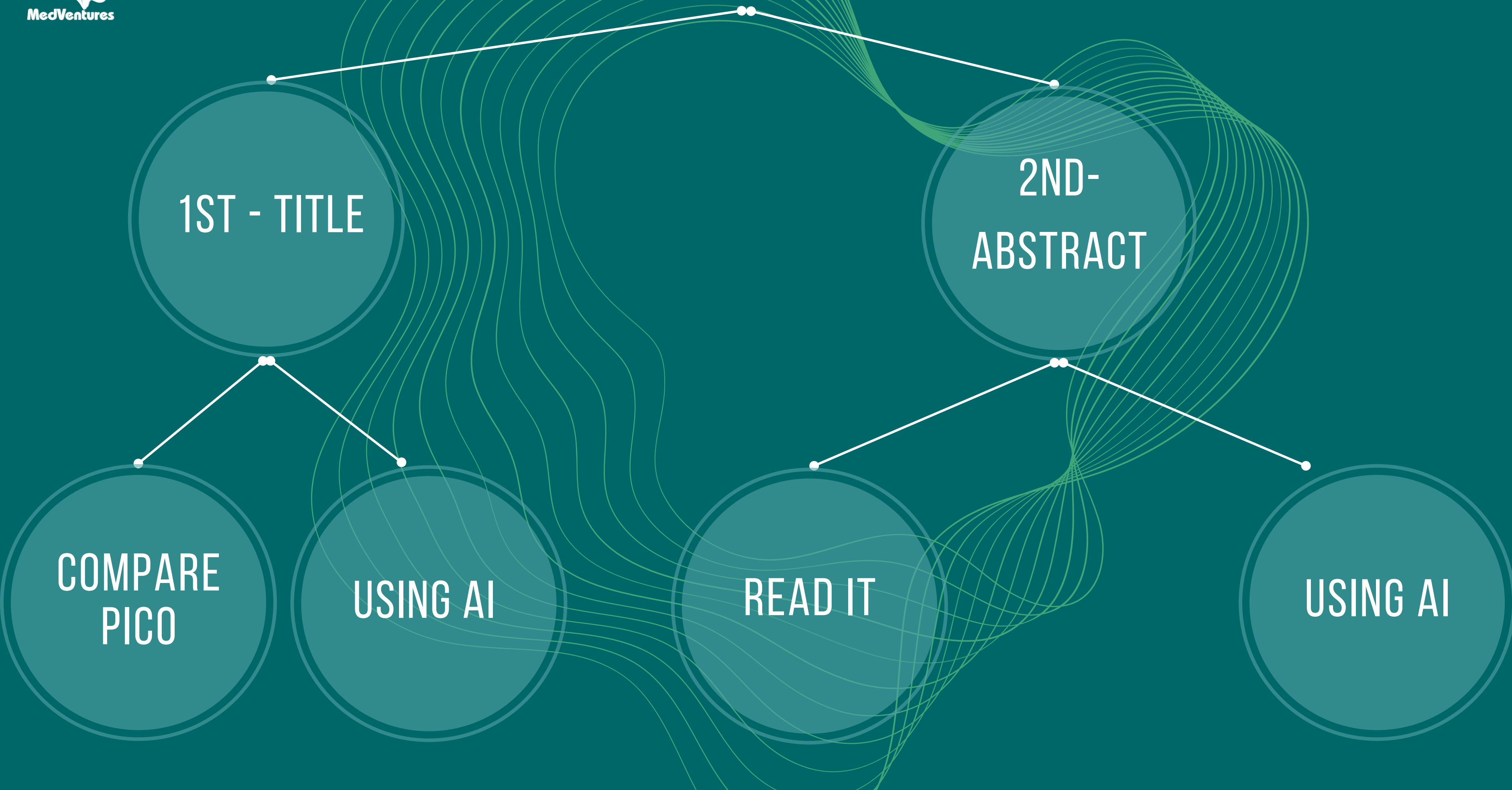
Reports excluded (DO IT)

- **Example reasons:**
 - *Reason1: Wrong study design (n=20)*
 - *Reason2: Incomplete data (n=15)*
 - *Reason3: Non-English language (n=5)*

30
Mins



PRIMARY SCREENING





PRISMA FLOW CHART MAKER

EXCEL SPECIAL COPY PASTE

5

Mins

**FINALLY YOUR PRIMARY
SCREENING IS DONE ALONG
WITH PRISMA FLOW CHART**

WHAT DID YOU LEARN ?

**THIS IS HIGH TIME TO GET TO
KNOW YOUR OWN RESEARCH**



GET TO KNOW YOUR OWN RESEARCH?

- READ ABOUT YOUR RESEARCH -
- USE AI OR DATABASES OR ANYTHING TO GATHER INFORMATION – NOT TO FILL UP THE TEMPLATE
- TYPE ALWAYS IN RESEARCH

EACH INDIVIDUAL WRITES IT DOWN -
EXPLAIN YOUR RESEARCH TO US.
TEMPLATE IS IN THE PORTAL -

20
Mins



**WITHIN YOUR TEAM
DISCUSS**

**10
Mins**

HOMEWORK

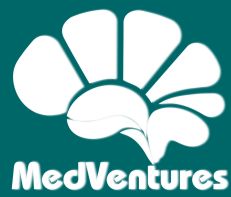
- RESTART YOUR SEARCH STRATEGY FROM SCRATCH WITH PROPER FILTERS (10 / 7 YEARS OLD) (RCTS, TRIALS AND SYSTEMATIC REVIEWS ONLY, HUMAN STUDIES ONLY)

SEARCH ALL DATABASES

- (PUBMED/MEDLINE , GOOGLE SCHOLARS, SCOPUS, COCHRANE, WEB OF SCIENCE, CINAHL, PSYCINFO, SCIEDIRECT , SPRINGERLINK, CLINICALTRIALS.GOV)

AI LITERATURE SCANNER AND TOOLS (OTHER SOURCES)

- SEMANTIC SCHOLAR
- CONSENSUS (MANUALLY ADD TO ZOTERO)
- SCITE.AI (FREE TRIAL)
- LITEMAPS (BOOLEANS AND SEARCH STRING DOESNT WORK) (SEARCH THE MOST RELATED PAPER HERE AND EXPLORE ITS SIMILAR ARTICLES AND ADD MANUALLY IN ZOTERO USING DOI)
- ELICIT.COM



HOMEWORK

- RAYYAN.AI VIDEO AND HOW TO USE WEBINAR -
- ELICIT.COM VIDEO

**EACH PAPER YOU
MISS .
MORE THE BIAS
YOU INCREASE**

THANK YOU