# **Dual Screening and Adjudication**

**Dual Screening** is a quality-controlled screening process, where two users independently screen each article, and then all screening decisions are adjudicated by an Administrator. Note, this is different than two-pass screening where a user first reviews abstracts and then full-texts of advanced articles. You can, however, perform dual two-pass screening in our software.

The Admin adjudicates any disagreement between the original screeners and sets the final determination for each study. For example, if Screener 1 includes a given study but Screener 2 excludes it for Reason 1, the Adjudicator will then need to choose between Inclusion, Excluding for Reason 1, or choosing to Exclude for Reason 2.

# Only those with Admin privileges can serve as Adjudicators, but any user can serve as a Screener.



Video

# **Configure Exclusion Reasons**

You will need to Configuring Exclusion Reasons before screening underlying studies.

# **Configure Dual Screening**

To configure dual screening in a nest, click on the "Settings" link under Nest Home. Once there, scroll down to the Screening section. Then, click on the "Dual" option in the (red box).

Last update: 2023/06/06 21:02	$wiki: autolit: screening: dual \ https://wiki.nested-knowledge.com/doku.php?id=wiki: autolit: screening: dual \ &rev=1686085378$
-------------------------------	---



#### Screening

In Standard Screening, one user screens each record. Inclusion sends the record forward for gathering, such as tagging, extraction, and Risk of Bias assessment. Exclusion does not queue the record for gathering.

In Dual Screening, two users independently screen each record, and then all screening determinations are reviewed by an administrator. The administrator adjudicates any disagreement between the original screeners to set the final determination for each record.

In Two Pass Screening, all records are first rapidly screened using only title and abstract. Records may be advanced from title/abstract screening to more intensive full text screening, where final inclusion is determined.

In Dual Two Pass Screening, two users rapidly screen all records using only title/abstract and these determinations are reviewed and advanced by an administrator. Two users then screen all full texts and final inclusion is determined by the administrator.

#### **Inclusion Modeling**

Inclusion models predict the probability of individual records being included during screening, using your past screening decisions. These probabilities help AutoLit determine which studies to show first during the screening process to get you screening faster.

The model can be trained manually or automatically (recommended). If the inclusion model is set to automatic, the model will be retrained after every 10 newly screened records. Otherwise, the model can be trained and retrained manually during screening. Your nest must contain at least 1 inclusion and 10 records in order to train a model.

#### **Hiding the Model**

Probabilities predicted by the model may be displayed during screening to speed up work or hidden if you wish to minimize bias. Studies will still be ordered by inclusion probability, even when hidden. To completely remove probabilities and ordering, delete the existing inclusion model and turn off automatic training.

Choose mode:

Choose Mode:

Choose number of reviewers:

Standard

Single

🔵 Dual

O Automatic Training

Choose:

Hide Probabilities

Once this is complete, a new "Adjudicate Screening" option will appear in the Nest Menu for all Admins:

2024/05/19	09:33

Nest Home	
Dashboard Settings	
Literature Search Other Sources Duplicate Review Search Exploration Query Builder	3/3
Dual Screening Configure Screening Adjudicate Screening	403/422
Tagging Configure Tagging	16/22
Extraction Configure Extraction	22/22
Risk of Bias	22/22
Study Inspector	
Synthesis Manuscript Editor Abstract Editor Export	

Note: Toggling back from Dual Screening to Standard Screening (or switching to Two-Pass Screening) will ONLY save final adjudications, so all records without an adjudicated Include or Exclude decision will be reverted to Unscreened and all data associated with individual users' decisions will be lost!

# **Dual Screening Steps**

### 1. Screen each study twice

Nested Knowledge - https://wiki.nested-knowledge.com/

Before Adjudication can take place, two independent users will need to screen each underlying study

using the same approach as Standard Screening Mode. AutoLit automatically queues the studies to all users until two screening decisions are made; then, the studies are sent forward for adjudication. You may want to view the full text, see instructions on Full Text Upload.

In Dual Screening, it can be useful to view the number of prior reviewers for the current record. This is displayed to the right of the include button (see below). 0 means no decisions have been made about the current record, 1 means 1 reviewer has made a decision, and so on.

Nest Home	Abstract Full Text Supplements Related Reports	■ 972 ⊘ 29 ⊘ 1,210 ⑦ 5 PN	ic 🗸	++	Navigation	~
Dashboard Settings	Spinner, 2020 Effect of Remdesivir vs Standard Care on Clinical Status at 11 Days in	Patients With Moderate COVID-19: A Randon	nized	Back		Skip
Literature Search 2/2	Clinical Trial.			+→ I	Dual Screening	^
Other Sources	Importance Remdesivir demonstrated clinical benefit in a placebo-controlled trial in pati	ents with severe coronavirus disease 2019 (COVID-19	), but its	Full Text Review	v 🗌 Train Inclu	ision Mode
uplicate Review	effect in patients with moderate disease is unknown. Objective To determine the efficac	y of 5 or 10 days of remdesivir treatment compared wi	th standard	Exclude:		
Search Exploration	care on clinical status on day 11 after initiation of treatment. Design, Setting, and Partic	pants Randomized, open-label trial of hospitalized pat	ients with	Search Rea		Q
Dual Screening 92 / 104	confirmed severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection an	d moderate COVID-19 pneumonia (pulmonary infiltrat	es and		Select Reason	
Configure Screening	room-air oxygen saturation >94%) enrolled from March 15 through April 18, 2020, at 10	5 hospitals in the United States, Europe, and Asia. The	e date of	Not an RCT o	f a drug of interest	
djudicate Screening	final follow-up was May 20, 2020. Interventions Patients were randomized in a 1:1:1 rat	io to receive a 10-day course of remdesivir (n = 197),	a 5-day	Protocol or Me	ethods article	
	course of remdesivir (n = 199), or standard care (n = 200). Remdesivir was dosed intra-	venously at 200 mg on day 1 followed by 100 mg/d. M	ain	Systematic Re	eview or Meta-analysis	
Tagging 3/3	Outcomes and Measures The primary end point was clinical status on day 11 on a 7-pc	int ordinal scale ranging from death (category 1) to dis	onargoa		ment, or opinion article	
Configure Tagging (category 7). Differences between remdesivir treatment groups and standard care were calculate		calculated using proportional odds models and expre	sseu as	Not related to		
	odds ratios. An odds ratio greater than 1 indicates difference in clinical status distribution	n toward category 7 for the remdesivir group vs the sta	andard		view of existing research	
Dual Extraction 1/3	care group. Results Among 596 patients who were randomized, 584 began the study a	nd received remdesivir or continued standard care (me	edian age,	Not an antivira	al	
Configure Extraction	57 [interquartile range, 46-66] years; 227 [39%] women; 56% had cardiovascular disea	se, 42% hypertension, and 40% diabetes), and 533 (9	1%)	Include:		_
	completed the trial. Median length of treatment was 5 days for patients in the 5-day rem	desivir group and 6 days for patients in the 10-day rer	ndesivir			0
Risk of Bias	group. On day 11, patients in the 5-day remdesivir group had statistically significantly hi receiving standard care (odds ratio, 1.65; 95% CI, 1.09-2.48; P = .02). The clinical statu	-			is study is associated wit reening decisions.	.h (0)
Study Inspector	standard care groups was not significantly different (P = .18 by Wilcoxon rank sum test, group, 3 (2%) in the 10-day remdesivir group, and 4 (2%) in the standard care group.			<del>4</del>	Comments (0)	$\sim$
Synthesis	(5% vs 3%) were more frequent among remdesivir-treated patients compared with stan			↔	History	$\sim$
Manuscript Editor Abstract Editor Export	moderate COVID-19, those randomized to a 10-day course of remdesivir did not have a with standard care at 11 days after initiation of treatment. Patients randomized to a 5-da	a statistically significant difference in clinical status con	npared			
	clinical status compared with standard care, but the difference was of uncertain clinical NCT04292730.	importance. Trial Registration ClinicalTrials.gov Identif	ier:			

However, in Dual modes the status of whether the full text has been uploaded or not by the other reviewer is hidden. This is to avoid bias as the knowledge that the other user has uploaded the record's full text may influence your screening decision. You still have the option to show the full text upload status as well as the full text regardless by clicking "Show Anyways." This action does not affect your screening decisions.

Nest Home Dashboard	Abstract Full Text Supplements Related Reports	■ 963 ⊘ 29 ⊘ 1,197 ③ 5 PMC ∨	+	Navigation	^
Settings			Back		(Skip)
	Full Text Blinded		+ C	Dual Screening	~
Literature Search 2/2	The full text may or may not be uploaded. Knowing this		Full Text Review	5	lusion Model
Other Sources Duplicate Review	information may bias your screening decision, by revealing the actions of another reviewer.		Full Text Uploa	ded!	×)
Search Exploration	actions of another reviewer.		Exclude:		
Dual Screening 92/104	Show Anyways		Search Reason	s	٩
Configure Screening			1	Select Reason 🗟	
Adjudicate Screening			Not an RCT of a d	drug of interest	
Tagging 3/3			Protocol or Meth		
				w or Meta-analysis	
Configure Tagging				nt, or opinion article	
Dual Extraction			Not related to CC		
				w of existing research	
Configure Extraction Adjudicate Extraction			Not an antiviral		
			Include:		
Risk of Bias 0/3				Include	
Study Inspector			<b>+</b>	Tagging	~
Synthesis			+ (	Comments (0)	~
Manuscript Editor Abstract Editor			+	History	~
Export					

## 2. [OPTIONAL] Auto-Adjudicate

All studies that have undergone two screening decisions are sent forward for adjudication, and any study that is either Included by both Screeners or Excluded by both Screeners is eligible for Auto-Adjudication.

To Auto-Adjudicate all eligible studies, navigate to Adjudicate Screening, and in the upper right, select "Auto-adjudicate  $\{x\}$  studies" (red box). This will automatically include all studies that both Screeners included, and exclude all studies that both Screeners excluded.

If Screener 1 and Screener 2 selected different Exclusion Reasons, the Auto-Adjudication will select only one of these and apply it as the final Exclusion Reason.

Abstract Full Text Supplements Related Reports	■ 1 ⊘ 0 ⊘ 0 ⑦ 0 PubMed ∨	₹	Agreements	^	
Tao, 2022		Auto Adjudica	te 6 Studies		
Trial of Endovascular Treatment of Acute Basilar-Artery Occlusion.					
BACKGROUND Data from trials investigating the effects and risks of endovascular thrombectomy for the treatment of st	roke due to basilar-artery occlusion are limited. METHODS	₹	Navigation	^	
We conducted a multicenter, prospective, randomized, controlled trial of endovascular thrombectomy for basilar-artery of	occlusion at 36 centers in China. Patients were assigned, in a			(Skip)	
2:1 ratio, within 12 hours after the estimated time of basilar-artery occlusion to receive endovascular thrombectomy or be					
functional status, defined as a score of 0 to 3 on the modified Rankin scale (range, 0 [no symptoms] to 6 [death]), at 90 of	<b>≓</b> Pre	liminary Screenings	s ^		
score of 0 to 2, distribution across the modified Rankin scale score categories, and quality of life. Safety outcomes include	ed symptomatic intracranial hemorrhage at 24 to 72 hours,	Screening 1:	Screening 2:		
90-day mortality, and procedural complications. RESULTS Of the 507 patients who underwent screening, 340 were in th	e intention-to-treat population, with 226 assigned to the	Exclude			
thrombectomy group and 114 to the control group. Intravenous thrombolysis was used in 31% of the patients in the throu	mbectomy group and in 34% of those in the control group.	(Exclude thi because It's t			
Good functional status at 90 days occurred in 104 patients (46%) in the thrombectomy group and in 26 (23%) in the con	trol group (adjusted rate ratio, 2.06; 95% confidence interval	worst)		)	
[CI], 1.46 to 2.91, P<0.001). Symptomatic intracranial hemorrhage occurred in 12 patients (5%) in the thrombectomy group	and in none in the control group. Results for the secondary 🚿				
clinical and imaging outcomes were generally in the same direction as those for the primary outcome. Mortality at 90 day		<b>≈</b> Sele	ect Different Option	n ^	
control group (adjusted risk ratio, 0.66; 95% Cl, 0.52 to 0.82). Procedural complications occurred in 14% of the patients in the thrombectomy group, including one death due to					
arterial perforation. CONCLUSIONS In a trial involving Chinese patients with basilar-artery occlusion, approximately one		Upload Full Te	ext	<b>1</b>	
endovascular thrombectomy within 12 hours after stroke onset led to better functional outcomes at 90 days than best medical care but was associated with procedural					
complications and intracerebral hemorrhage. (Funded by the Program for Innovative Research Team of the First Affiliated Hospital of USTC and others; ATTENTION ClinicalTrials.gov			(Search Reasons Q)		
number, NCT04751708.).			Select Reason 🗟		
Population/Problem Intervention Outcome	2	Secondary analy	/sis		
	1	Not an RCT			
(Keywords V) (Edit)		Published Before 2014-01-01			
		Protocol or Met			
			use of mechanical thrombe	ctomy	
		No Intervention			
			or Systematic Review		
	1 I I I I I I I I I I I I I I I I I I I	Include:			
	L		Include		
		₹	Tagging	$\sim$	
		₹	Comments (0)	$\sim$	
		₹	History	$\sim$	

## 3. Adjudicate Disagreements

For any study that is not Auto-Adjudicated, an Admin will need to manually adjudicate in order to provide a final screening decision. The Admin should choose between selecting the decision of Screener 1 or Screener 2, or if both are incorrect, provide a different option (red box). Once adjudicated, the studies will either be excluded or included and sent forward to Tagging.

## Kappa Statistics for Interrater Reliability

After you finish Dual Screening, you can view the Kappa statistics in Dashboard.

## **Guidance on Dual Screening Best Practices**

For guidance on best practices in Dual Screening, click here.

From: https://wiki.nested-knowledge.com/ - Nested Knowledge

Permanent link:

https://wiki.nested-knowledge.com/doku.php?id=wiki:autolit:screening:dual&rev=168 6085378

Last update: 2023/06/06 21:02