1 SEARCH STRATEGY

2 The full content of each string is reported below. PubMed database was searched, by inserting one string at the time on the research bar. No limitations or filters were set during our PubMed search. 3 No backward time limitation was set, we included studies published up to September 10th, 2023.

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6 **PubMed Strings:**

Riociguat: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND 7 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All 8 Fields] OR ("interstitial" [All Fields] AND "lung" [All Fields] AND "diseases" [All Fields])) 9 AND ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 10 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All 11 Fields] AND "hypertension" [All Fields])) AND ("riociguat" [Supplementary Concept] OR 12 13 "riociguat"[All Fields]).

Sildenafil: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND 14 "diseases" [All Fields] AND "interstitial" [All Fields]) OR "interstitial lung diseases" [All 15 16 Fields] OR ("interstitial" [All Fields] AND "lung" [All Fields] AND "diseases" [All Fields])) AND ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 17 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All 18 Fields] AND "hypertension" [All Fields])) AND ("sildenafil citrate" [MeSH Terms] OR 19 ("sildenafil" [All Fields] AND "citrate" [All Fields]) OR "sildenafil citrate" [All Fields] OR 20 "sildenafil" [All Fields] OR "sildenafil s" [All Fields]) 21

Tadalafil: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND 22 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All 23 Fields] OR ("interstitial" [All Fields] AND "lung" [All Fields] AND "diseases" [All Fields])) 24 AND ("hypertension, pulmonary"[MeSH Terms] OR ("hypertension"[All Fields] AND 25 "pulmonary" [All Fields]) OR "pulmonary hypertension" [All Fields] OR ("pulmonary" [All 26

Fields] AND "hypertension"[All Fields])) AND ("tadalafil"[MeSH Terms] OR "tadalafil"[All
 Fields])

- Bosentan: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND
 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All
 Fields] OR ("interstitial"[All Fields] AND "lung"[All Fields] AND "diseases"[All Fields]))
 AND ("hypertension, pulmonary"[MeSH Terms] OR ("hypertension"[All Fields] AND
 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All
 Fields] AND "hypertension"[All Fields])) AND ("bosentan"[MeSH Terms] OR
 "bosentan"[All Fields])
- Macitentan: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND
 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All
 Fields] OR ("interstitial"[All Fields] AND "lung"[All Fields] AND "diseases"[All Fields]))
 AND ("hypertension, pulmonary"[MeSH Terms] OR ("hypertension"[All Fields] AND
 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All
 Fields] AND "hypertension"[All Fields])) AND ("macitentan"[Supplementary Concept] OR
 "macitentan"[All Fields])
- Ambrisentan: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND
 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All
 Fields] OR ("interstitial"[All Fields] AND "lung"[All Fields] AND "diseases"[All Fields]))
 AND ("hypertension, pulmonary"[MeSH Terms] OR ("hypertension"[All Fields] AND
 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All
 Fields] AND "hypertension"[All Fields])) AND ("ambrisentan"[Supplementary Concept] OR
 "ambrisentan"[All Fields])
- Treprostinil: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND
 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All
 Fields] OR ("interstitial"[All Fields] AND "lung"[All Fields] AND "diseases"[All Fields]))

1 AND ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 2 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All Fields] AND "hypertension" [All Fields])) AND ("treprostinil" [Supplementary Concept] OR 3 4 "treprostinil"[All Fields]) Iloprost: ("lung diseases, interstitial"[MeSH Terms] OR ("lung"[All Fields] AND 5 6 "diseases"[All Fields] AND "interstitial"[All Fields]) OR "interstitial lung diseases"[All Fields] OR ("interstitial" [All Fields] AND "lung" [All Fields] AND "diseases" [All Fields])) 7 AND ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 8 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All 9 10 Fields] AND "hypertension" [All Fields])) AND ("iloprost" [MeSH Terms] OR "iloprost" [All Fields]) 11 Selexipag: ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 12 "pulmonary" [All Fields]) OR "pulmonary hypertension" [All Fields] OR ("pulmonary" [All 13 Fields] AND "hypertension"[All Fields])) AND ("selexipag"[Supplementary Concept] OR 14 15 "selexipag"[All Fields]) Isosorbide: ("hypertension, pulmonary" [MeSH Terms] OR ("hypertension" [All Fields] AND 16 "pulmonary"[All Fields]) OR "pulmonary hypertension"[All Fields] OR ("pulmonary"[All 17 Fields] AND "hypertension"[All Fields])) AND ("isosorbide"[All Fields] 18 OR "isosorbide"[MeSH Terms] OR "isosorbide"[All Fields]) 19

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ClinicalTrials.gov was also employed to search for clinical trials. The words of [*vasoactive drug*] (in eg., riociguat) and "*pulmonary hypertension*" were inserted in the research string panel for each vasoactive drug. The resulting clinical trials were then considered for screening if their status was addressed as "completed with results". No backward time limitation was set, we included studies published up to September 10th, 2023.

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1 ClinicalTrial.gov string panel:

2	٠	Riociguat ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
3	•	Sildenafil ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
4	•	Tadalafil ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
5	•	Bosentan ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
6	•	Macitentan ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
7	•	Ambrisentan ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
8	•	Treprostinil ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
9	•	Iloprost ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
10	•	Selexipag ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
11	•	Isosorbide ("intervention/treatment") AND pulmonary hypertension ("condition/disease")
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