Supplemental Table 6. Search strategy

PubMed/MEDLINE: 1950 to May 2015 and Web of Science: 1945 to May 2015

("Child" OR "Children" OR "Child, Preschool" OR "Infant" OR "Infants" OR "Infant, Newborn" OR "Infant, Low Birth Weight" OR "Infant, Postmature" OR "Infant, Premature" OR "Infants, Newborn" OR "Newborn Infant" OR "Newborn Infants" OR "Neonat*" OR "Newbor*" OR "Infant, Small for Gestational Age" OR "Infant, Very Low Birth Weight" OR "Infant, Extremely Premature") **AND (**"Hospitals" OR "Hospital" OR "Hospitals, Community" OR "Hospitals, General" OR "Hospitals, Group Practice" OR "Hospitals, High-Volume" OR "Hospitals, Low-Volume" OR "Hospitals, Private" OR "Hospitals, Proprietary" OR "Hospitals, Religious" OR "Hospitals, Voluntary" OR "Hospitals, Public" OR "Hospitals, County" OR "Hospitals, District" OR "Hospitals, Federal" OR "Hospitals, Municipal" OR "Hospitals, State" OR "Hospitals, Rural" OR "Hospitals, Satellite" OR "Hospitals, Special" OR "Cancer Care Facilities" OR "Cardiac Care Facilities" OR "Hospices" OR "Hospitals, Chronic Disease" OR "Hospitals, Convalescent" OR "Hospitals, Isolation" OR "Hospitals, Maternity" OR "Hospitals, Osteopathic" OR "Hospitals, Pediatric" OR "Hospitals, Psychiatric" OR "Surgicenters" OR "Hospitals, Teaching" OR "Hospitals, University" OR "Hospitals, Urban" OR "Hospitals, Municipal" OR "Tertiary Care Centers") **AND** ("Risk Factors" OR "Factor, Risk" OR "Factors, Risk" OR "Risk Factor") **AND** ("Drug-Related Side Effects and Adverse Reactions" OR "Drug Related Side Effects and Adverse Reactions" OR "Drug Toxicity" OR "Drug Toxicities" OR "Toxicities, Drug" OR "Toxicity, Drug" OR "Drug Side Effects" OR "Drug Side Effect" OR "Effect, Drug Side" OR "Effects, Drug Side" OR "Side Effect, Drug" OR "Side Effects, Drug" OR "Side Effects of Drugs" OR "Drugs Side Effect" OR "Drugs Side Effects" OR "Adverse Drug Reaction" OR "Adverse Drug Reactions" OR "Drug Reaction, Adverse" OR "Drug Reactions, Adverse" OR "Reaction, Adverse Drug" OR "Reactions, Adverse Drug" OR "Adverse Drug Event" OR "Adverse Drug Events" OR "Drug Event, Adverse" OR "Drug Events, Adverse" OR "Event, Adverse Drug" OR "Events, Adverse Drug" OR "Akathisia, Drug-Induced" OR "Anticholinergic Syndrome" OR "Cardiotoxicity" OR "Drug Hypersensitivity" OR "Asthma, Aspirin-Induced" OR "Drug Eruptions" OR "Drug-Induced Liver Injury" OR "Drug-Induced Liver Injury, Chronic" OR "Dyskinesia, Drug-Induced" OR "Metabolic Side Effects of Drugs and Substances" OR "Serotonin Syndrome") **AND** ("Cohort Studies" OR "Cohort Study" OR "Studies, Cohort" OR "Study, Cohort" OR "Concurrent Studies" OR "Studies, Concurrent" OR "Concurrent Study" OR "Study, Concurrent" OR "Closed Cohort Studies" OR "Cohort Studies, Closed" OR "Closed Cohort Study" OR "Cohort Study, Closed" OR "Study, Closed Cohort" OR "Studies, Closed Cohort" OR "Analysis, Cohort" OR "Cohort Analysis" OR "Analyses, Cohort" OR "Cohort Analyses" OR "Historical Cohort Studies" OR "Cohort Study, Historical" OR "Historical Cohort Study" OR "Study, Historical Cohort" OR "Studies, Historical Cohort" OR "Cohort Studies, Historical" OR "Incidence Studies" OR "Incidence Study" OR "Studies, Incidence" OR "Study, Incidence" OR "Follow-Up Studies" OR "Longitudinal Studies" OR "National Longitudinal Study of Adolescent Health" OR "Prospective Studies" OR "Retrospective Studies")

LILACS: 1982 to May 2015

(MH:Child OR Niño OR Criança OR "Child, Preschool" OR Preescolar OR Pré-Escolar OR Infant$ OR Preescolares OR "Niño Preescolar" OR "Niños Preescolares" OR Pré-Escolares OR "Criança Pré-Escolar" OR "Crianças Pré-Escolares") OR (MH: Infant OR Lactante OR Lactente OR "Infant, Newborn" OR "Recién Nacido" OR Recém-Nascido OR "Criança Recém-Nascida" OR "Crianças Recém Nascidas" OR "Lactente Recém-Nascido" OR "Lactentes Recém-Nascidos" OR Neonat$ OR "Recém-Nascido (RN)" OR "Niño Recién Nacido" OR "Niños Recién Nacidos" OR "Lactante Recién Nacido" OR "Lactantes Recién Nacidos") **AND** (MH: Hospitals OR Hospitales OR Hospitais OR "Centro Hospitalar" OR "Centros Hospitalares" OR Hospital OR Nosocômi$ OR "Hospitais Comunitários" OR "Hospitais Gerais" OR "Hospitais de Prática de Grupo" OR "Hospitais com Alto Volume de Atendimentos" OR "Hospitais com Baixo Volume de Atendimentos" OR "Hospitais Privados" OR "Hospitais Públicos" OR "Hospitais Rurais" OR "Hospitais Satélites" OR "Hospitais Especializados" OR "Hospitais de Ensino"

OR "Hospitais Urbanos" OR "Centros de Atenção Terciária" OR "Unidades Hospitalares" OR "Hospitais Dia" OR "Hospitais Geriátricos" OR "Hospitais Psiquiátricos" OR "Hospitais Estaduais" OR "Hospitais Filantrópicos" OR "Hospitais de Dermatologia Sanitária de Patologia Tropical" OR "Hospitales Comunitarios" OR "Hospitales Generales" OR "Hospitales de Práctica de Grupo" OR "Hospitales de Alto Volumen" OR "Hospitales de Bajo Volumen" OR "Hospitales Privados" OR "Hospitales Públicos" OR "Hospitales Rurales" OR "Hospitales Satélites" OR "Hospitales Especializados" OR "Hospitales Escuela" OR "Hospitales Urbanos" OR "Centros de Atención Terciaria" OR "Hospitales de Día" OR "Hospitales Geriátricos" OR "Hospitales Psiquiátricos" OR "Hospitales del Estado" OR "Hospitales Filantrópicos" OR "Hospitals, Community" OR "Hospitals, General" OR "Hospitals, Group Practice" OR "Hospitals, High-Volume" OR "Hospitals, Low-Volume" OR "Hospitals, Private" OR "Hospitals, Public" OR "Hospitals, Rural" OR "Hospitals, Satellite" OR "Hospitals, Special" OR "Hospitals, Teaching" OR "Hospitals, Urban" OR "Tertiary Care Centers" OR "Hospitals, Day" OR "Geriatric Hospitals" OR "Hospitals, Psychiatric" OR "Hospitals, State" OR "Hospitals, Voluntary") **AND** (MH: "Risk Factors" OR "Factores de Riesgo" OR "Fatores de Risco" OR "Factor de Riesgo" OR "Fator de Risco" OR "Fatores de Risco Biológicos" OR "Fatores de Risco Não Biológicos" OR "Fatores de Riscos Biológicos" OR "Fatores de Riscos Não Biológicos") **AND** (MH:"Drug-Related Side Effects and Adverse Reactions" OR "Efectos Colaterales y Reacciones Adversas Relacionados con Medicamentos" OR "Efeitos Colaterais e Reações Adversas Relacionados a Medicamentos" OR "Akathisia, Drug-Induced" OR "Anticholinergic Syndrome" OR Cardiotoxicity OR "Drug Hypersensitivity" OR "Drug-Induced Liver Injury" OR "Dyskinesia, Drug-Induced" OR "Metabolic Side Effects of Drugs and Substances" OR "Serotonin Syndrome" OR "Reacciones Adversas y Efectos Colaterales Relacionados con Medicamentos Toxicidad de Medicamentos" OR "Acatisia Inducida por Medicamentos" OR "Síndrome Anticolinérgico" OR "Cardiotoxicidad" OR "Hipersensibilidad a las Drogas" OR "Enfermedad Hepática Inducida por Drogas" OR "Discinesia Inducida por Medicamentos" OR "Efectos Metabólicos Secundarios de Drogas y Sustancias" OR "Síndrome de la Serotonina" OR "Efeito Colateral" OR "Efeitos Colaterais de Drogas" OR "Efeitos Colaterais de Fármacos" OR "Efeitos Colaterais de Medicamentos" OR "Efeitos Colaterais e Reações Adversas Associados a Medicamentos" OR "Efeitos Colaterais e Reações Adversas Relacionados a Drogas" OR "Reação Adversa" OR "Reações Adversas e Efeitos Colaterais Relacionados a Drogas" OR "Reações Adversas e Efeitos Colaterais Relacionados a Medicamentos" OR "Toxicidade de Drogas" OR "Toxicidade de Fármacos" OR "Toxicidade de Medicamentos" OR "Acatisia Induzida por Medicamentos" OR "Síndrome Anticolinérgica" OR Cardiotoxicidade OR "Hipersensibilidade a Drogas" OR "Doença Hepática Induzida por Drogas" OR "Discinesia Induzida por Medicamentos" OR "Efeitos Colaterais Metabólicos de Drogas e Substâncias" OR "Síndrome da Serotonina") **AND** (PT: "Cohort Studies" OR "Estudios de Cohortes" OR "Estudos de Coortes" OR "Cohort Analysis" OR "Closed Cohort Studies" OR "Concurrent Studies" OR "Historical Cohort Studies" OR "Incidence Studies" OR "Follow-Up Studies" OR "Longitudinal Studies" OR "Prospective Studies" OR "Retrospective Studies" OR "Análisis de Cohortes" OR "Estudios Cerrados de Cohortes" OR "Estudios de Concurrencia" OR "Estudios Históricos de Cohortes" OR "Estudios de Incidencia" OR "Estudios de Seguimiento" OR "Estudios Longitudinales" OR "Estudios Prospectivos" OR "Estudios Retrospectivos" OR "Análise de Coortes" OR "Estudos Fechados de Coortes" OR "Estudos Históricos de Coortes" OR "Estudos de Incidência" OR Seguimentos OR "Estudos Longitudinais" OR "Estudos Prospectivos" OR "Estudos Retrospectivos")

Scopus: 1996 to may 2015

TITLE-ABS-KEY(Child OR Niño OR Criança OR "Child, Preschool" OR Preescolar OR Pré-Escolar OR Infant$ OR Preescolares OR "Niño Preescolar" OR "Niños Preescolares" OR Pré-Escolares OR "Criança Pré-Escolar" OR "Crianças Pré-Escolares") **OR** TITLE-ABS-KEY(Infant OR Lactante OR Lactente OR "Infant, Newborn" OR "Recién Nacido" OR Recém-Nascido OR "Criança Recém-Nascida" OR "Crianças Recém Nascidas" OR "Lactente Recém-Nascido" OR "Lactentes Recém-Nascidos" OR Neonat$ OR "Recém-Nascido (RN)" OR "Niño Recién Nacido" OR "Niños Recién Nacidos" OR "Lactante Recién Nacido" OR "Lactantes Recién Nacidos") **AND** TITLE-ABS-KEY(Hospitals OR Hospitales OR

Hospitais OR "Centro Hospitalar" OR "Centros Hospitalares" OR Hospital OR Nosocômi$ OR "Hospitais Comunitários" OR "Hospitais Gerais" OR "Hospitais de Prática de Grupo" OR "Hospitais com Alto Volume de Atendimentos" OR "Hospitais com Baixo Volume de Atendimentos" OR "Hospitais Privados" OR "Hospitais Públicos" OR "Hospitais Rurais" OR "Hospitais Satélites" OR "Hospitais Especializados" OR "Hospitais de Ensino" OR "Hospitais Urbanos" OR "Centros de Atenção Terciária" OR "Unidades Hospitalares" OR "Hospitais Dia" OR "Hospitais Geriátricos" OR "Hospitais Psiquiátricos" OR "Hospitais Estaduais" OR "Hospitais Filantrópicos" OR "Hospitais de Dermatologia Sanitária de Patologia Tropical" OR "Hospitales Comunitarios" OR "Hospitales Generales" OR "Hospitales de Práctica de Grupo" OR "Hospitales de Alto Volumen" OR "Hospitales de Bajo Volumen" OR "Hospitales Privados" OR "Hospitales Públicos" OR "Hospitales Rurales" OR "Hospitales Satélites" OR "Hospitales Especializados" OR "Hospitales Escuela" OR "Hospitales Urbanos" OR "Centros de Atención Terciaria" OR "Hospitales de Día" OR "Hospitales Geriátricos" OR "Hospitales Psiquiátricos" OR "Hospitales del Estado" OR "Hospitales Filantrópicos" OR "Hospitals, Community" OR "Hospitals, General" OR "Hospitals, Group Practice" OR "Hospitals, High-Volume" OR "Hospitals, Low-Volume" OR "Hospitals, Private" OR "Hospitals, Public" OR "Hospitals, Rural" OR "Hospitals, Satellite" OR "Hospitals, Special" OR "Hospitals, Teaching" OR "Hospitals, Urban" OR "Tertiary Care Centers" OR "Hospitals, Day" OR "Geriatric Hospitals" OR "Hospitals, Psychiatric" OR "Hospitals, State" OR "Hospitals, Voluntary") **AND** TITLE-ABS-KEY("Risk Factors" OR "Factores de Riesgo" OR "Fatores de Risco" OR "Factor de Riesgo" OR "Fator de Risco" OR "Fatores de Risco Biológicos" OR "Fatores de Risco Não Biológicos" OR "Fatores de Riscos Biológicos" OR "Fatores de Riscos Não Biológicos") **AND** TITLE-ABS-KEY("Drug-Related Side Effects and Adverse Reactions" OR "Efectos Colaterales y Reacciones Adversas Relacionados con Medicamentos" OR "Efeitos Colaterais e Reações Adversas Relacionados a Medicamentos" OR "Akathisia, Drug-Induced" OR "Anticholinergic Syndrome" OR Cardiotoxicity OR "Drug Hypersensitivity" OR "Drug-Induced Liver Injury" OR "Dyskinesia, Drug-Induced" OR "Metabolic Side Effects of Drugs and Substances" OR "Serotonin Syndrome" OR "Reacciones Adversas y Efectos Colaterales Relacionados con Medicamentos Toxicidad de Medicamentos" OR "Acatisia Inducida por Medicamentos" OR "Síndrome Anticolinérgico" OR "Cardiotoxicidad" OR "Hipersensibilidad a las Drogas" OR "Enfermedad Hepática Inducida por Drogas" OR "Discinesia Inducida por Medicamentos" OR "Efectos Metabólicos Secundarios de Drogas y Sustancias" OR "Síndrome de la Serotonina" OR "Efeito Colateral" OR "Efeitos Colaterais de Drogas" OR "Efeitos Colaterais de Fármacos" OR "Efeitos Colaterais de Medicamentos" OR "Efeitos Colaterais e Reações Adversas Associados a Medicamentos" OR "Efeitos Colaterais e Reações Adversas Relacionados a Drogas" OR "Reação Adversa" OR "Reações Adversas e Efeitos Colaterais Relacionados a Drogas" OR "Reações Adversas e Efeitos Colaterais Relacionados a Medicamentos" OR "Toxicidade de Drogas" OR "Toxicidade de Fármacos" OR "Toxicidade de Medicamentos" OR "Acatisia Induzida por Medicamentos" OR "Síndrome Anticolinérgica" OR Cardiotoxicidade OR "Hipersensibilidade a Drogas" OR "Doença Hepática Induzida por Drogas" OR "Discinesia Induzida por Medicamentos" OR "Efeitos Colaterais Metabólicos de Drogas e Substâncias" OR "Síndrome da Serotonina") **AND** TITLE-ABS-KEY("Cohort Studies" OR "Estudios de Cohortes" OR "Estudos de Coortes" OR "Cohort Analysis" OR "Closed Cohort Studies" OR "Concurrent Studies" OR "Historical Cohort Studies" OR "Incidence Studies" OR "Follow-Up Studies" OR "Longitudinal Studies" OR "Prospective Studies" OR "Retrospective Studies" OR "Análisis de Cohortes" OR "Estudios Cerrados de Cohortes" OR "Estudios de Concurrencia" OR "Estudios Históricos de Cohortes" OR "Estudios de Incidencia" OR "Estudios de Seguimiento" OR "Estudios Longitudinales" OR "Estudios Prospectivos" OR "Estudios Retrospectivos" OR "Análise de Coortes" OR "Estudos Fechados de Coortes" OR "Estudos Históricos de Coortes" OR "Estudos de Incidência" OR Seguimentos OR "Estudos Longitudinais" OR "Estudos Prospectivos" OR "Estudos Retrospectivos")

Supplemental Table 7. Characteristics of prospective cohort studies on risk factors for adverse drug reactions in pediatric inpatient.

Title	Author	Journal	Year	Country	Result (RF / multivariate analysis)	Conclusion
Epidemiology and potential risk factors of drug-related problems in Hong Kong paediatric wards.	Rashed et al.	British Journal of Clinical Pharmacology	2014	China	Prescription ≥ 5 drugs (OR: 2.2; CI 95%: 1.3-4.0; $p = 0.006$).	DRPs in hospitalized children in Hong Kong were common. There are limited data in South-East Asia about pediatric medication usage; this study has highlighted the need for more local research.
Incidence, characteristics and risk factors of adverse drug reactions in hospitalized children – a prospective observational cohort study of 6,601 admissions.	Thiesen et al.	BMC Medicine	2013	United Kingdom	i) increase in the number of prescription drugs (HR: 1.25; CI 95%: 1.22-1.28; $p < 0.001$); ii) general anesthetic administration (HR: 6.38; CI 95%: 5.30-7.68; $p < 0.001$); and iii) oncological treatment (HR: 1.89; CI 95%: 1.36-2.63; $p < 0.001$).	ADRs in hospitalized children are common and the incidence is much greater than in adults. Drugs used in perioperative management appear to be a major risk factor for experiencing an ADR, thus, systematic monitoring of common and severe adverse effects of these drug groups would be an important step towards improving their safety.
Adverse drug events in a paediatric intensive care unit: a prospective cohort.	Silva et al.	BMJ Open	2013	Brazil	i) age < 48 months (OR: 2.1; CI 95%: 1.19-3.72; $p = 0.01$); ii) age < 48 months associated with administration ≥ 5 drugs (OR: 2.05, CI 95%: 1.18-3.57, $p = 0.01$)	The use of multiple drugs as well as lesser patient age favors the occurrence of ADEs, which in turn may result in an increase in the length of PICU hospitalization. The use of an active search using triggers can provide a systematic approach to identifying ADEs in PICUs.
Epidemiology and potential associated risk factors of drug-related problems in hospitalised children in the United Kingdom and Saudi Arabia.	Rashed, Neubert, et al.	European Journal of Clinical Pharmacology	2012	United Kingdom and Saudi Arabia	i) aged between 6-12 years (OR: 1.9; CI 95%: 1.1-3.3; p: 0.016); ii) prescription ≥ 5 drugs (OR: 2.4; CI 95%: 1.7-3.4; $p < 0.001$); iii) scheduled admission (OR: 2.6; CI 95%: 1.7-4.1, $p < 0.001$); and iv) transferred admission (OR: 4.2; CI 95%: 2.9-6.1; $p < 0.001$).	To improve prescribing practices and minimize the risk of DRPs in hospitalized children the importance of pediatric pharmacology and pharmacotherapy within medical and nursing education should be recognized.

Supplemental Table 7. Continued.

Title	Author	Journal	Year	Country	Result (RF / multivariate analysis)	Conclusion
Risk factors associated with adverse drug reactions in hospitalised children: international multicentre study.	Rashed, Wong, et al.	European Journal of Clinical Pharmacology	2012	Australia, Germany, China, Malaysia and United Kingdom	i) aged between 11-18 years (OR: 2.1; CI 95%: 1.1-3.8; $p = 0.02$); ii) prescription from 1-4 low-risk drugs (OR: 2.3; CI 95%: 1.4-4.0; p: 0.002); iii) prescription from 2-3 high-risk drugs (OR: 2.4; CI 95%: 1.0-5.6; $p = 0.04$); iv) D50-D89 (OR: 2.3; CI 95%: 1.0-5.1; $p = 0.04$); and v) G00-G99 (OR: 2.3; CI 95%: 1.3-4.2; $p = 0.006$); vi) P00–P96 (OR: 2.6; CI: 1.0-6.5; p: 0.04).	The healthcare professionals should keep the number of prescribed drugs as low as possible, pay particular attention to children prescribed five drugs or more and to those children at high risk, such as immuno-compromised patients.
Adverse drug reactions in hospitalized children in Fortaleza, Brazil.	dos Santos and Coelho	Pharmacoepidemiology and Drug Safety	2006	Brazil	i) male (OR: 2.83; CI 95%: 1.19-6.73; $p < 0.05$); ii) administration of 6-10 drugs (OR: 7.45; CI 95%: 1.88-29.65; $p < 0.001$); iii) administration $\geq$ 11 drugs (OR: 20.33; CI 95%: 3.57–115.73; $p < 0.05$)	The need to take into account children's vulnerability to adverse reactions to medicines, particularly those of younger age and whenever the concomitant use of several medicines is necessary.
Adverse drug reactions to unlicensed and off-label drugs on paediatric wards: a prospective study.	Turner et al.	Acta Paediatrica	1999	United Kingdom	Number of drugs administered (RR: 1.27; CI 95%: 1.21-1.34, $p < 0.0001$).	The off-label use and unlicensed medicines in children are clearly an area where the European Medicines Evaluation Agency, the European Community and National Departments of Health alongside the pharmaceutical industry must take on the responsibility to fund further studies.

ADR: adverse drug reaction. D50-D89: Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (as ICD-10). DRP: drug-related problems. G00-G99: diseases of the nervous system (as ICD-10). HR: hazard ratio. CI: confidence interval. IF: impact factor. OR: odds ratio. P00-P96: certain conditions originating in the perinatal period (as ICD-10). PICU: pediatric intensive care unit. RF: risk factor. RR: relative risk.

Supplemental Table 8. Other characteristics of prospective cohort studies on risk factors for adverse drug reactions in pediatric inpatient.

Author	Duration of follow-up by research centers	Total research centers	Clinical setting	Age	Sample size	Patients with ADRs (OI%)	Method for assessing causality	Compliance level to STROBE	Study quality (NEWCASTLE-OTTAWA)
Rashed et al. 2014	4 months	7 centers in the same country	Medical wards, PICU e NICU	0-18 years old	329	9 (2.7%)[†]	Naranjo algorithm	72.7%	Selection: *** Comparability: * Outcome: **
Thiesen et al. 2013	12 months	1 center	17 wards, including oncology wards and the high dependency unit	16 years 11 months old	5.118[b]	906[‡] (17.7%)	Naranjo algorithm	87.9%	Selection: *** Comparability: * Outcome: ***
Silva et al. 2013	6 months	1 center	PICU	0-18 years old	239	84 (35.1%)	Naranjo algorithm	78.8%	Selection: **** Comparability: * Outcome: ***
Rashed, Neubert, et al. 2012	3 months	2 centers in different countries	Medical wards, PICU e NICU	0-18 years old	737	63 (8.5%)	Naranjo algorithm	72.7%	Selection: *** Comparability: * Outcome: **
Rashed , Wong, et al. 2012	3 months	5 centers in different countries	Paediatric general medical wards	0-18 years old	1115	186 (16.7%)	Naranjo algorithm	81.8%	Selection: **** Comparability: * Outcome: ***
dos Santos and Coelho, 2006	5 months	1 center	1 pediatric ward with different specialties	0-16 years old	265	33 (12.5%)	WHO-ART	72.7%	Selection: ** Comparability: * Outcome: ***
Turner et al. 1999	3 months	1 center	5 wards, including cardiac intensive care and ICU	Without age definition	936	116 (12.4%)[†]	Unofficial classification by definition	51.5%	Selection: ** Comparability: * Outcome: *

ART: Adverse Reaction Terminology. OI: overall incidence. NICU: neonatal intensive care units. PICU: pediatric intensive care units. WHO: World Health Organization.

*stars acquired during analysis.

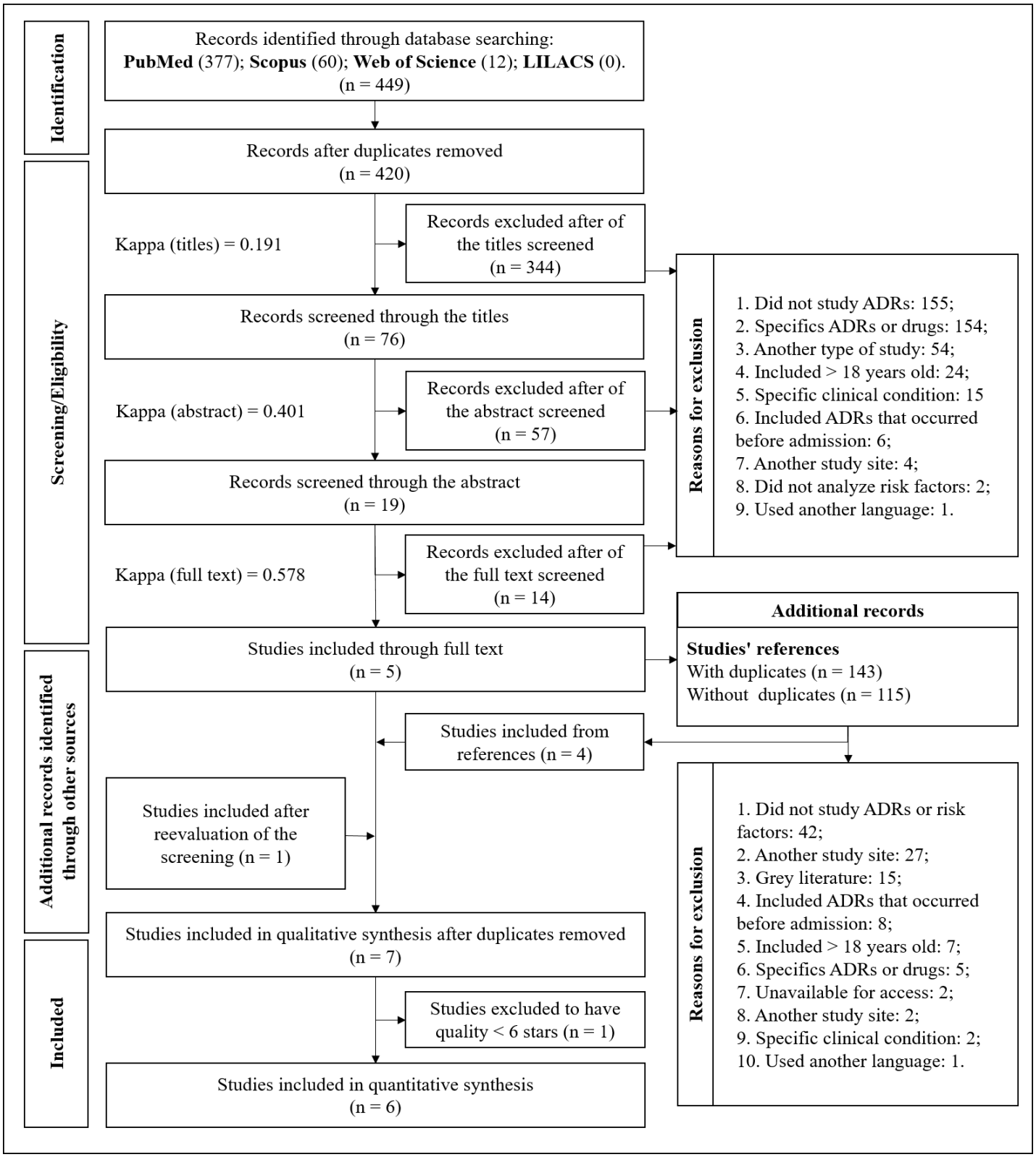
[†]the overall incidence was calculated by the author of this review, from the sample size and patient with ADRs number presented in the study.

[‡]the patient with ADRs number was calculated by the author of this review, from the overall incidence and sample size presented in the study.

Supplemental Table 9. PRISMA Checklist

Section/Topic	#	Checklist item	Reported on page #
Title			
	1	Identify the report as a systematic review, meta-analysis, or both	1
Abstract			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number	2
Introduction			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3
Methods			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (eg, Web address), and, if available, provide registration information including registration number.	4
Eligibility criteria	6	Specify study characteristics (eg, PICOS, length of follow-up) and report characteristics (eg, years considered, language, publication status) used as criteria for eligibility, giving rationale.	4
Information sources	7	Describe all information sources (eg, databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	4, Online supplement (1-3)
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4,5
Data collection process	10	Describe method of data extraction from reports (eg, piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5
Data items	11	List and define all variables for which data were sought (eg, PICOS, funding sources) and any assumptions and simplifications made.	4
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	5
Summary measures	13	State the principal summary measures (eg, risk ratio, difference in means).	5
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (eg, I2) for each meta-analysis.	5
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (eg, publication bias, selective reporting within studies).	5
Additional analyses	16	Describe methods of additional analyses (eg, sensitivity or subgroup analyses, meta-regression), if done, indicating which were prespecified.	5
Results			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Online Supplement (8)
Study characteristics	18	For each study, present characteristics for which data were extracted (eg, study size, PICOS, follow-up period) and provide the citations.	Online Supplement (4-6)
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	6 ,7, Online Supplement (6)
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	26-29, Online Supplement (6)
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	8-11
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Online supplement
Additional analysis	23	Give results of additional analyses, if done (eg, sensitivity or subgroup analyses, meta-regression [see Item 16]).	8-11
Discussion			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their elevance to key groups (eg, healthcare providers, users, and policy makers).	12-14
Limitations	25	Discuss limitations at study and outcome level (eg, risk of bias), and at review-level (eg, incomplete retrieval of identified research, reporting bias).	15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	16
Funding			
	27	Describe sources of funding for the systematic review and other support (eg, supply of data); role of funders for the systematic review.	1

Source: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. PICOS: population, intervention, comparator, outcome, study.



Supplemental Figure 2. Adapted PRISMA flow diagram.