**Supplementary Material Appendix B: Search strategy**

**Final search strategy for PubMed**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease | "shoulder impingement syndrome"[MeSH Terms] OR "rotator cuff"[Title/Abstract] OR "shoulder impingement"[Title/Abstract] OR "rotator cuff impingement syndrome"[Title/Abstract] OR "coracohumeral impingement"[Title/Abstract] OR "coracoid impingement syndrome"[Title/Abstract] OR "coracohumeral impingement"[Title/Abstract] OR "subacromial impingement syndrome"[Title/Abstract] OR "outlet impingement syndrome"[Title/Abstract] OR "outlet impingement"[Title/Abstract] OR "internal impingement syndrome"[Title/Abstract] OR "posterosuperior glenoid impingement"[Title/Abstract] OR "Impingement"[Title/Abstract] | 23455 |
| #2 | Study design | "Randomized Controlled Trial" [Publication Type] OR Randomized [Title/Abstract] OR Randomised [Title/Abstract] OR Randomization [Title/Abstract] OR Randomisation [Title/Abstract] | 908564 |
| #3 | Corticosteroids | "Adrenal Cortex Hormones"[Mesh] OR "Adrenal Cortex Hormones"[Title/Abstract] OR Corticosteroid [Title/Abstract] OR Corticosteroids [Title/Abstract] OR Corticoid [Title/Abstract] OR Corticoids [Title/Abstract] | 359006 |
| #4 | Intervention | "ultrasonography"[Title/Abstract] OR "ultrasound"[Title/Abstract]) AND "Injection"[Title/Abstract]  | 12501 |
| #5 | Final query | #1 AND #2 AND #3 AND #4 | 48 |

**Final search strategy for Embase**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease | 'shoulder impingement syndrome'/exp OR 'shoulder impingement syndrome’: ti, ab, kw OR 'rotator cuff': ti, ab, kw OR impingement: ti, ab, kw | 28534 |
| #2 | Study design | 'randomized controlled trial'/exp OR 'randomized controlled trial': ti, ab, it OR 'randomized': ti ,ab, it OR 'randomized': ti, ab, it OR 'randomization': ti, ab, it OR 'randomization': ti, ab, it OR rct : ti, ab, it | 1200527 |
| #3 | Corticosteroids | 'corticosteroid'/exp OR ‘adrenal cortex hormones': ab, ti,kw OR corticosteroid: ab, ti,kw OR corticosteroids: ab, ti,kw OR corticoid: ab, ti,kw OR corticoids: ab, ti,kw | 1080959 |
| #4 | Intervention | ('injection'/exp OR injection: ab, ti,kw) AND('ultrasound'/exp OR ultrasound: ab, ti,kw OR 'echography'/exp OR echography: ab, ti,kw) | 32593 |
| #5 | Final query | #1 AND #2 AND #3 AND #4 | 86 |

**Final search strategy for Web of Science**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease | TS= (shoulder impingement syndrome) | 4064 |
| #2 | Study design | TS= (Randomized controlled trial) | 669045 |
| #3 | Corticosteroids | TS= (Adrenal Cortex Hormones)  OR TS= (Corticosteroid) OR  TS=(Corticosteroids) OR TS=(Corticoid) OR TS=(Corticoids)   | 251755 |
| #4 | Intervention | (TS= ultrasound) AND (TS=injection)  | 21418 |
| #5 | Final query | #1 AND #2 AND #3 AND #4 | 25 |

**Final search strategy for Cochrane Central Register of Controlled Trials**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease  | MeSH descriptor: [Shoulder Impingement Syndrome] explode all trees | 385 |
| #2 |  | (Shoulder Impingement Syndrome): ti, ab, kw | 789 |
| #3 |  | (rotator cuff impingement syndrome):ti, ab, kw | 298 |
| #4 |  | (rotator cuff): ti, ab, kw | 2046 |
| #5 |  | (Impingement): ti, ab, kw | 1303 |
| #6 |  | #1 OR #2 OR #3 OR #4OR #5 | 3028 |
| #7 | Study design | MeSH descriptor: [Randomized Controlled Trial] explode all trees | 119 |
| #8 |  | MeSH descriptor: [Random Allocation] explode all trees | 20643 |
| #9 |  | (randomized controlled trial): ti, ab,kw | 691288 |
| #10 |  | (random allocation): ti, ab, kw | 92908 |
| #11 |  | #7 or #8 or #9 or #10  | 728367 |
| #12 |  | #6 AND #11 | 1627 |
| #13 | Corticosteroids | MeSH descriptor: [Adrenal Cortex Hormones] explode all trees  | 14775 |
| #14 |  | (Adrenal Cortex Hormones): ti, ab, kw | 2632 |
| #15 |  | (Corticosteroid): ti, ab, kw | 23095 |
| #16 |  | (Corticosteroids): ti, ab, kw | 23036 |
| #17 |  | (Corticoid): ti, ab, kw | 550 |
| #18 |  | (Corticoids): ti, ab, kw | 494 |
| #19 |  | #13 or #14 or #15 or #16 or #17 or #18 | 52180 |
| #20 | Intervention | (ultrasound): ti, ab, kw | 32442 |
| #21 | MeSH descriptor: [Injections] explode all trees OR (Injections): ti, ab, kw | 106533 |
| #22 |  | #20 AND #21 | 5110 |
| #23 | Final query | #6 AND #12 AND #19 AND #22 | 68 |

**Final search strategy for** **Scopus**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease | (TITLE-ABS-KEY ("shoulder impingement syndrome") OR TITLE-ABS-KEY "rotator cuff" ) OR TITLE-ABS-KEY ("shoulder impingement" ) OR TITLE-ABS-KEY ("rotator cuff impingement syndrome" ) OR TITLE-ABS-KEY ("Impingement") )  | 50954 |
| #2 | Study design | (TITLE-ABS-KEY ("Randomized") OR TITLE-ABS-KEY ("Randomised")  OR  TITLE-ABS-KEY ("Randomization")  OR  TITLE-ABS-KEY ("Randomisation") )   | 1239128 |
| #3 | Corticosteroids | (TITLE-ABS-KEY ("Adrenal Cortex Hormones") OR TITLE-ABS-KEY ("Corticosteroid")  OR  TITLE-BS-KEY ( "Corticosteroids" )  OR  TITLE-ABS-KEY ( "Corticoid" )  OR  TITLE-ABS-KEY ( "Corticoids" ) )   | 325740 |
| #4 | Intervention | (TITLE-ABS-KEY “ultrasound”) AND (TITLE-ABS-KEY” injection”)  | 17775  |
| #5 | Final query | #1 AND #2 AND #3 AND #4 | 65 |

**Final search for Sinomed**

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| #ID | Topic or intervention | Query | Records |
| #1 | Disease | ("撞击综合征"[常用字段:智能]) OR ("峰下撞击"[常用字段:智能]) OR ("肌腱套撞击综合症"[常用字段:智能]) OR ("肩膀撞击"[常用字段:智能]) OR ("肩撞击综合征"[常用字段:智能]) | 3225 |
| #2 | Study design | ("对照临床试验"[常用字段:智能]) OR ("随机"[常用字段:智能]) OR ("临床试验"[常用字段:智能]) OR ("随机对照试验"[常用字段:智能]) | 2280474 |
| #3 | Corticosteroids | ("皮质激素"[常用字段:智能]) OR ("皮质激素类"[常用字段:智能]) OR ("糖皮质激素类"[常用字段:智能])  | 439480 |
| #4 | Intervention | 超声检查，超声，注射 | 26240 |
| #5 | Final query | #1 AND #2 AND #3 AND #4 | 4 |