SUPPLEMENT 1A. QUERY KEYWORDS

PubMed Query

(("osteocalcin"[MeSH Terms] OR "osteocalcin"[All Fields]) AND ("diabetes mellitus"[MeSH Terms] OR ("diabetes"[All Fields] AND "mellitus"[All Fields]) OR "diabetes mellitus"[All Fields] OR "diabetes"[All Fields] OR ("diabetes"[All Fields] AND "insipidus"[All Fields])) NOT ("review"[Publication Type] OR "review literature as topic"[MeSH Terms] OR "review"[All Fields]) AND ("humans"[MeSH Terms] AND (English[lang]) OR Spanish[lang]))

SCOPUS Query

TITLE-ABS-KEY(osteocalcin AND diabetes AND HUMAN) AND (LIMIT-TO (DOCTYPE, "ar ")) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE, "Spanish"))

WOS search

TS=osteocalcin OR, osteocalcin AND, diabetes mellitus OR, diabetes AND, mellitus OR, diabetes mellitus OR, diabetes OR, diabetes

Refined by: Document type: (ARTICLE) AND [excluding] Data base: (MEDLINE)

Period of search: All years.

Language=Auto

SUPPLEMENT 1B. REASONS OF EXCLUSION

| Author | Year | Reason of exclusion |
|-----------------|------|--|
| Boucher-Berry | 2012 | No control group included |
| Bouillon | 1995 | Mix population (adults and children) |
| Brandao | 2007 | No report of OC in control group |
| De Schepper | 1997 | No control group included |
| Gogas Yavuz | 2011 | Mix population (adults and children) |
| Gonzalez-Garcia | 2015 | No children |
| Ibañez | 2010 | It is an experimental study |
| Kemink | 2000 | No children |
| Kocabas | 2010 | Do not report OC levels |
| Liu | 2003 | Mix population (adults and children) |
| Mastrandrea | 2008 | Mix population (adults and children) |
| Napoli | 2013 | It is an experimental study |
| Olmos | 1994 | No children included |
| Prats-Puig | 2011 | No correlations; no comparisons of OC levels among |
| | | diabetes and HS |

| Simm | 2011 | It is an experimental study |
|--------------|------|--|
| | | |
| Thrailkill | 2011 | Mix population (adults and children) |
| Tsentidis | 2016 | No serum levels of OC reported; nor correlations |
| Verroti | 1999 | Mix population (adults and children) |
| Gajewska | 2017 | No diabetics; no correlations of OC with metabolic |
| | | parameters; no OC serum levels |
| Poomthavorn | 2013 | No diabetics; no correlations of OC with metabolic |
| | | parameters; no OC serum levels |
| Saggese | 1991 | It is an experimental study |
| Topaglu | 2005 | It was made in diabetic ketoacidosis patients (acute |
| | | illness) |
| Diniz-Santos | 2007 | It reports only cases of patients with T1D with and |
| | | without celiac disease |
| Flemming | 2012 | Because the study was performed only in healthy |
| | | children and adolescents. It does not include diabetic |
| | | patients |
| Tsentidis | 2015 | Because the correlation reported was between logOC |
| | | and glycemia but not between absolute OC |
| | | concentrations and glycemia |