**SUPPLEMENTARY MATERIAL**

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| **References** | **Language** | **No. of**  **Pregnant women/gestation period** | **Biological sample collection sites** | **Analyzed antibiotic susceptibility and resistance** | **Capsular serotyping methods** | **Detected serotypes** | **Typeable No. (NT)** |
| **Chukwu** ***et al.* 2015** | English | 413 pregnant women  16–38 weeks | Biological samples: vaginal and rectal | No | Latex agglutination (specific antisera against types Ia, Ib, and II–IX)  Lagglutination test kit (Staten Serum Institute, Copenhagen, Denmark) (Slotved et al., 2003) Conventional PCR detected on 2% agarose gel (Borchardt et al. 2004, Kong et al. 2005) | Ia, Ib, II, III, IV, and  V | Yes |
| **Mukesi *et al.* 2019** | English | 530 pregnant women  (Namibia)  100 pregnant women  (South Africa)  35–37 weeks | One vaginal and one rectal swab | No | Multiplex PCR with capsular-specific primer pairs (Adapted from Poyart et al., 2007) Ethidium bromide stained 1% agarose gel electrophoresis at 120 V for 45 min | Ia, Ib, II, III, IV, and  V | No |
| **[Slotved](https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-017-1419-0" \l "auth-1) *et al.* 2017** | English | 400 pregnant women  Mamprobi 200  Dangme West 200  35–37 weeks | A rectal and a vaginal swab  Questionnaire | No | GBS latex serotyping kit  Strep-B-Latex kit (Statens Serum Institute, Denmark) | Ia, II, III, IV,  V, VII, VIII, and IX | No |
| **Belard *et al.*2015** | English | 549 pregnant women  At birth | Rectovaginal swabs | Yes | Capsular polysaccharide serotypes Ia, Ib, and II–IX: latex agglutination (Strep-B-latex kit; article 54991 / Lot La- 1-4, Statens Serum Institute, Denmark). The isolates were further confirmed by multiplex PCR, Creti et al. | Ia, Ib, II, III, and V | No |
| **A’Hearn-Thomas**  ***et al.*2019** | English | 274 pregnant women  ≥35 weeks | Rectovaginal swabs | No | Real-time PCR (Breeding 2016)  Colonization cases were confirmed by isolation of each individual serotype and confirmation by latex agglutination or real-time PCR Immulex Latex Agglutination Streptococcus B kit (Staten Serum Institute; Copenhagen, Denmark) | Ia, Ib, II, III, IV, and V | No |
| **Kwatra *et al.*2014** | English | 661 pregnant women  20th–25th weeks  621  26th–30th weeks  595  31st–35th weeks  521  >37 weeks | Vaginal and rectal swabs  Questionnaire | No | Isolates were serotyped by latex agglutination.  Specific antisera against  type Ia, Ib, and CPS antigens.  II–IX (Statens Serum Institute, SSI, Sweden) (Afshar et al, 2011) Serological isolates Non-typable Characterized by PCR (Poyart et al, 2007) | Ia, Ib, II, III,  IV, V, and IX | Yes |
| **Burcham *et al.*2019** | English | 39 strains  isolated from pregnant women  Gestational period: unknown | Vaginal tract | No | PCR  (Poyart et al 2007) | Ia, Ib, II, III, IV, and  V | No |
| **Lu *et al.*2014** | English | 2850 pregnant women  35–37 weeks | Vaginorectal swab | Yes | PCR (Poyart et al 2007, Imperi et al 2010, Yao et al 2013) | Ia, Ib, II, III, V, VI, and VIII | Yes |
| **Yan *et al.*2016** | English | 231 pregnant women  Gestational period: unknown | Vaginorectal Swab | Yes | Multiplex polymerase chain reaction (PCR) (Imperi et al, 2010) | Ia, Ib, II, III, V, VI, and VII | Yes |
| **Wang *et al.* 2015** | English | 863 pregnant women  35th–37th  weeks | Rectal and vaginal swabs  Interview | Yes | Strep-B-Latex Kit, Statens Serum Institute, Copenhagen, Denmark), Yao et al. 2013 | Ia, Ib, II, III, and V | Yes |
| **Ji *et al.*2017** | English | 7726 pregnant women  35th–37th  weeks | A single rectal vaginal swab | No | Latex agglutination (Strep-B-Latex kit; Statens Serum Institute, Copenhagen, Denmark) | Ia, Ib, III, V, VI, and  VIII | Yes |
| **Wang *et al.* 2018** | English | 104 pregnant women  (≥28 weeks of gestation) | Anogenital swabs  Interview  Questionnaire | No | Multiplex PCR  1.5% agarose gel electrophoresis and stained with ethidium bromide  The products were visualized and documented using the Image Quant™ LAS 500 (GE Health Care®, UK). | Ia, Ib, III, IV, V, VI | No |
| **Lin *et al.*2016** | English | Invasive blood strains  (*n*=126) and colonizing strains from anogenital samples (*n*=8)  Gestational period Not informed | Vaginal and rectal swab | No | Tested for serotypes by multiplex PCR assay (Imperi et al, 2010) and pulsed field gel electrophoresis (PFGE). Serotype VI isolates were further analyzed by MLST. | Ib, III, V, and VI | No |
| **Kunze *et al.*2011** | English | 869 pregnant women  (35–37 weeks) | Vaginal and rectal cultures  medical record | No | Agglutination with specific antisera for capsular serotypes I–V according to the manufacturer's instructions (Denka Seiken, Tokyo, Japan) | Ia, Ib, II, III, IV, and V | Yes |
| **Turner *et al.*2012** | English | 549 pregnant women  28–30 weeks | Vaginal rectal swab | Yes | Latex agglutination (Strep-B-Latex kit, Statens Serum Institute, Copenhagen, Denmark)  Multiplex PCR (Afshar et al, 2011) | Ia, Ib, II, III, IV, V, VI, and VII | Yes |
| **Saha *et al.*2017** | English | 1151 pregnant women  At birth | Vaginal and rectal swabs  Rectal swabs  Vaginal swab | No | GBS type-specific antisera against capsular antigens Ia, Ib, and II–IX (Statens Serum Institute, SSI, Denmark), following the method described by Slotved et al. 2007  multiplex PCR | Ia, Ib, II, III, IV, V, VI, and VII | No |
| **Clouse *et al.*2019** | English | 200 pregnant women  Gestational period: unknown | Single vaginal-rectal swab  Interview Questionnaire  medical record | No | Nested PCR in real time (Khatami et al 2019)  confirmed with latex agglutination (IMMULEX™ kit  STREP-B, Statens Serum Institute, Hillerød, Denmark) | Ia, Ib, III, and V | No |
| **Pinto *et al.*2018** | English | 6692 pregnant women  35–37 weeks | Vagina and rectum (two swabs)  laboratory record  medical record | No | Multiplex PCR for serotypes Ia, Ib, and II–IX using the primers described by Poyart et al. and Imperi et al. 2010 | Ia, Ib,II,III,IV,V, VI | Yes |
| **Brzychczy-włoch *et al.*2012** | English | 1176 pregnant women  35–37 weeks | One swab from the lower vagina and one from the rectum  Rectum and vagina 280 (80%)  Vagina 33 (9%)  Rectum 40 (11%) | No | Specific initiators (Genomed, Poland) (Poyart et al, 2007)  PCR products were resolved on 2% agarose gel with 0.25 µg/mL ethidium bromide | Ia, Ib, II, III, IV, and V | No |
| **Andrade *et al.* 2017** | English | 363 pregnant women  35–37 weeks | Vaginal and rectal swab | Yes | Serotyping with commercial latex agglutination test (containing reagents for serotypes Ia, Ib, and II–IX; Strep-B-Latex Kit; Statens Serum Institute, Copenhagen, Denmark)  Multiplex PCR was performed according to Imperi et al 2010  2% gel electrophoresis in TAE buffer | Ia, Ib, II, III, and V | No |
| **Soares *et al.* 2014** | English | 33 strains  isolated from pregnant women  >25 weeks | Vaginal swab | Yes | Serotyped by agarose immunoprecipitation using novel locally produced sera and HCl antigen extracts from cultures | Ia, Ib, II, III, V | Yes |
| **Botelho *et al.*2018** | English | 3647 pregnant women  35th–37th weeks | A single ano-vaginal sample  medical record | Yes | Ouchterlony double immunodiffusion method after HCl extraction of capsular polysaccharides  specific antisera (provided by the Centers for Disease Control and Prevention, CDC, GA, USA) against types Ia-VIII | Ia, Ib, II, III, IV, and V | Yes |
| **de Almeida Corrêa**  ***et al.*2011** | English | 51 isolated  Gestational period: unknown | Vaginal swab | Yes | The strains were serotyped by  Agarose immunoprecipitation using antisera to type Ia, Ib and II-VIII antigens | Ia, Ib, II, III, IV,  V, and VIII | Yes |
| **Nascimento 2019** | Portuguese | 292 strains  isolated from pregnant women | Urine Vaginal Secretion | Yes | Multiplex PCR Imperi et al 2010 | Ia, Ib, II, III, V, and IX | Yes |
| **Feuerschuette 2018** | Portuguese | 316 pregnant women  35–37 weeks | Anogenital swabs  Interview  Questionnaire | Yes | Multiplex PCR Primers (Feuerschuette, 2018)  1.5% agarose gel electrophoresis and stained with ethidium bromide  The products were visualized and documented using the Image Quant™ LAS 500 (GE  Health Care®, UK). | Ia, Ib, II, III, IV, V, VII, and VIII | No |
| **Siqueira 2017** | Portuguese | 501 pregnant women  35–37 weeks | A rectal vaginal swab | Yes | Latex agglutination with the Immulex® Strepto B test manufactured by the Statens Serum Institute | Ia, Ib, II, III, V, VIII | Yes |
| **Botelho 2014** | Portuguese | 250 pregnant women  35th week | Vagina, the anus, and the vagina-anus combination  personal data sheet | No | Multiplex PCR Imperi et al 2010  Agarose gel electrophoresis (UltraPure Agarose, Invitrogen, USA) at 2% in 0.5X TBE buffer. After treatment with ethidium bromide at 0.5 µg/mL, the presence/absence of bands of the expected size was analyzed using a 100 pb marker (Invitrogen, USA) and transillumination with UV light. | Ia, Ib, II, III, and V | No |
| **Hassan and Saleh, 2019** | English | 200 pregnant women  34–37 weeks | Vaginal swabs | No | Antisera related to serotypes Ia, Ib, and II–IX  capsular polysaccharide antigen (Immulex  ™ strep-B, Diagnostics Denmark) | Ia, Ib, II, III, IV, V, and VI | No |
| **Ali *et al.* 2019** | English | 280 pregnant women  At birth | A vaginal and a rectal swab  Questionnaire Interview | No | Antisera to serotypes Ia, Ib, II, III, IV, V, VI, VII, VIII, and IX  (Statens Serum Institute, Denmark)  (Slotved et al, 2003) | Ia, Ib, II, III, and V | Yes |
| **Teatero *et al.*2017** | English | 102 isolated pregnant women  35–37 weeks | Vaginal/rectal swabs | Yes | Serotyping, by latex agglutination, (Slotved et al, 2007)  PCR capsular typing of non-typeable strains was performed using a multiplex PCR scheme (Yao, 2013) | Ia, Ib, II, III, IV, V, and VI | Yes |
| **López**  ***et al.*2018** | English | 95 pregnant women  35–37 weeks | Rectal-vaginal and endocervical swabs | Yes | Multiplex PCR (Poyart et al, 2007) | Ia, Ib, II, III, IV, and V | No |
| **Elikwu *et al.*2016** | English | 300 pregnant women  28 weeks and at delivery | Vaginorectal swab | No | Multiplex PCR (Imperi et al 2010)  gel electrophoresis | Ia, Ib, II, III, V, and VI | No |
| **Oviedo *et al.*2013** | English | 3125 pregnant women  35–37 weeks | Rectovaginal swab | Yes | Strep-B Latex (Statens Serum Institute, Denmark) | Ia, Ib, II, III, V and IX | Yes |
| **Morozumi *et al.*2015** | English | 1226  36–39 weeks | Vaginal swab  Exam registration form | No | Rt-PCR *(Poyart et al 2007*) | Ia, Ib, II, III, IV, V, VI, and VIII | Yes |
| **Le Doare**  ***et al.*2016** | English | 750 pregnant women  At birth | Rectovaginal Swabs  Questionnaire | No | Conventional PCR and identified using gel PCR and agarose electrophoresis (Imperi et al, 2010) | Ia, Ib, II, III, and V | Yes |
| **Seoud et al.2010** | English | 775 pregnant women  At birth | Vagina and rectum  Interview Questionnaire | No | Molecular serotyping was performed using PCR and sequencing | Ia, Ib,  II, III, IV, and V | Yes |
| **Lee** ***et al.*2019** | English | 150 pregnant women  16–40 weeks | Vaginal-rectal swab | No | PCR multiplex (Kong et al 2002; Slotved et al 2007) | Ib, II, III, IV, V, VI | No |
| **Sadeh *et al.*2016** | English | 100 GBS strains isolated from 237 pregnant women. Gestational period: unknown | Rectovaginal swabs | No | PCR multiplex (Poyart, 2007) | Ia, Ib, II, III, and V | No |
| **Mavenyengwa *et al.*2010** | English | 121 isolates from pregnant women Gestational period: unknown | Vaginal samples | No | Molecular serotyping (PCR) | Ia, Ib, II, III, V | Yes |
| **Fröhlicher *et al.*2014** | English | 364 isolates from pregnant women  Any time of pregnancy | Vaginal, cervical or Vaginal-perianal swab | Yes | Latex, Statens Serum Institute, Copenhagen, Denmark)  Non-typeable strains were examined by polymerase chain reaction (PCR) analysis, Kong 2002 | Ia, Ib, II, III, IV, V, VI, VII, VIII, and IX | No |
| **Shabayek *et al.*2014** | English | 264 pregnant women  Gestational period: unknown | Vaginal swab | No | Serotyped (types Ia, Ib, and II–VIII)  with the Essum GBS Serotyping Kit (Essum AB, Sweden)  Multiplex PCR (Imperi et al 2010; Kong et al 2002) | Ia, Ib, II, III, IV, V, and VI | No |
| **Kimura *et al.*2013** | English | 122 pregnant women  141 isolates  1st group: 34, 23rd–25th weeks  2nd group 61, 34th–36th weeks  3rd group: 27,  two periods | Vaginal samples | No | Agglutination with antisera (Denka-Seiken) against Ia, Ib, II, III, IV, V, VI, VII, and VIII 31 clinical isolates No  typable (PCR), Poyart et al 2007 | Ia, Ib, II, III, V, VI, VII, and VIII | Yes |
| **García *et al.*2011** | Spanish | 130 pregnant women  35th–37th weeks | A vaginal and a rectal swab | No | Serotyping for *Streptococcus agalactiae* (Strep-B-Latex® Statens Serum Institute kit) | Ia | Yes |
| **Liébana-martos *et al.*2015** | Spanish | 1180 pregnant women  35th–37th weeks | Vaginal and rectal samples | Yes | Latex agglutination (Statens Serum Institut, Denmark) | Ia, Ib, II, III, IV, V, VII, and IX | Yes |
| **Liakopoulos *et al.*2014** | English | 171 vaginal isolates | Vaginal sample | No | Coagglutination method using antisera against types I to VIII (Essum, Umeå, Sweden) | Ib, III, IV and V | No |
| **Brigtsen *et al.*2015** | English | 1739 pregnant women  At birth | Vaginal-rectal sample | No | Latex agglutination  (Reagents Ia, Ib, and II–IX; Strep-B-Latex kit, Statens Serum Institute, Copenhagen, Denmark)  Capsular molecular typing (Bochardt et al., 2004; Imperi et al., 2010; Kong et al., 130 2002;  Poyart et al., 2007) | Ia, Ib, II, III, IV, V, VI, VIII, and IX | Yes |
| **Furfaro *et al.* 2019** | English | 814 pregnant women  ≤22 weeks and ≥33 weeks | A vaginal and a rectal swab  Questionnaire | Yes | Multiplex PCR (Furfaro et al 2017)  Standard PCR (Imperi et al 2010) | Ia, Ib, II, III, IV, V, VI, VIII, and IX | Yes |
| **Hong *et al.* 2010** | English | 4045  35th–37th weeks | Two different anorectal vaginal swabs | No | Group B typing serums (Denka Seiken, Tokyo, Japan).  These sera contained six type-specific agglutinins against GBS serotypes, including Ia, Ib, II, III, IV, and V. | Ia, Ib, II, III, IV, V | Yes |