Terminology for describing normally-sited and ectopic pregnancies on ultrasound: ESHRE recommendations for good practice

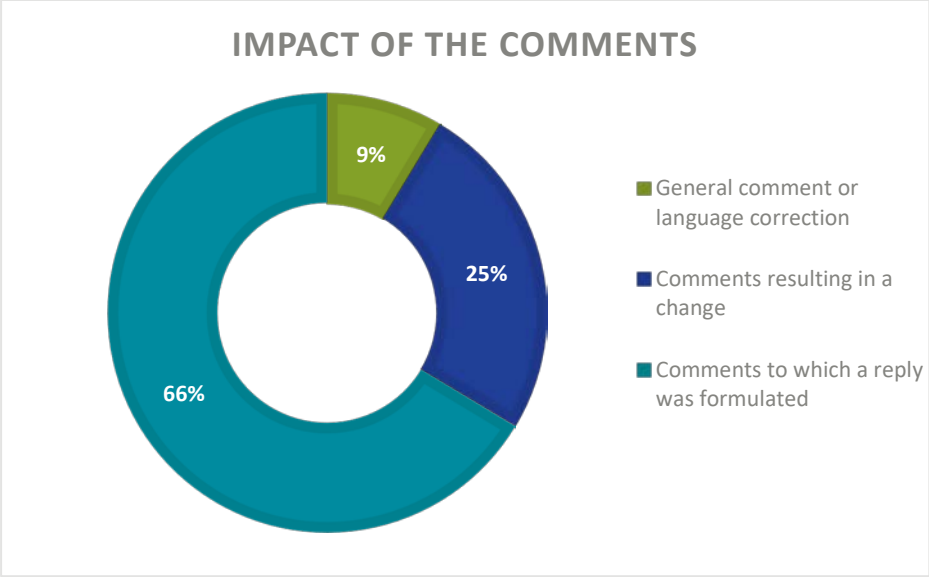
Set-up

The invitation to review was sent to the members of the SIG Implantation and early pregnancy (n=7443 email addresses). In addition, the invitation was mailed to the members of the ESHRE Executive Committee and the Committee of National Representatives (n=74). An announcement was also placed on the eshre.eu website.

The stakeholder review started on 20th of April 2020, and was closed after 4 weeks, on the 18th of May 2020.

Summary

Thirty reviewers, representing nineteen countries, submitted a total of 212 comments (on average 7 comments per reviewer). All reviewers are listed on page 2.



This report comprises the list of reviewers, and the overview of comments, with a reply from the working group.

List of reviewers

Name	Country	Organization
Masoud Kamrava	Iran	
Steven Goldstein	USA	
Ulrike Metzger	France	
Grigorios Derdelis	Greece	
Luca Savelli	Italy	
Gangaraju Buvaneswari	India	
Mridu Sinha	India	
Onur Erol	Turkey	
Aboubakr Mohamed Elnashar	Egypt	
Jiuzhi Zeng	China	
Carlos Calhaz-Jorge	Portugal	
Dr. Nidaa	Qatar	
Attilio Di Spiezio Sardo	Italy	
Melinda Mitranovici	Romania	
Ali Sami Gurbuz	Turkey	
Philippe Merviel	France	
Roy Farquharson	UK	
Ilan Timor	USA	
Alessandra Pipan	United Arab Emirates	
Wen Jui Yang	Taiwan	Company, Taiwan IVF Group Center
Lorenzo Abad de Velasco	Spain	
Monica Varma	India	
Kumaran Aswathy	India	
Annick Geril	Belgium	
Snezana Vidakovic	Serbia	
Lukasz Polanski, Miriam Baumgarten, Rebecca McKay, Laura Rutherford, Ouma Pillay, Anita Jeyaraj, Kanna Jayaprakasan and Kamal Ojha	UK	organization
Mohamed Shahin	UK	
Mohsen M El-Sayed	UK	
International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)		ISUOG
Prof. dr. J.A.F. Huirne	The Netherlands	European Niche taskforce group of the ESGE and international Niche research group

List of comments from the reviewers with reply of the working group

Reviewer	Page	Line	Comment	Reply GDG
General comments				
Masoud Kamrava			It's a great, well thought and written monograph. It will standardize and define different modes of therapy based on the early findings on vaginal ultrasound exam. The final outline is clear. Tubal ectopics DO invade the endosalpinx. Successful treatments may differ because of this.	Thank you.
Steven Goldstein			I live in the United States so I am not as familiar with ESHRE guidelines as, for instance, ACOG practice bulletins. However I think this current project, while obviously a lot of work by many learned and diligent healthcare providers, is absolutely not approaching this topic from a direction that will optimize patient care and minimize patient harms. The ESHRE website lists 13 guidelines to "help doctors in their daily practice with the best diagnosis and treatments for their patients". There are six more "recommendations under development". One of the six is "ectopic pregnancy", yet the document is entitled "Terminology for describing normally sited and ectopic pregnancies on Ultrasound: ESHRE recommendations for good practice." I believe that the approach to this issue taken by an organization like ACOG is much more clinically relevant than this current document out for comment. ACOG's document is entitled "tubal ectopic pregnancy" which accounts for 90% of cases of abnormally located pregnancies. In that document they describe the need for often combining ultrasound findings with hCG levels, usually serially, to achieve an optimal diagnosis in many many cases. This is also very closely intertwined with clinical management. I am concerned about calling C-section scar pregnancies, cervical pregnancies, interstitial pregnancies "ectopics". I do not want to enter into a debate on semantics. I say this because it is	We are grateful to Dr Goldstein for his comments. We are aware that he has argued for a long time against using the term uterine ectopic pregnancies. However, most clinicians would classify interstitial, cervical and Caesarean scar pregnancies as ectopic pregnancies. They are partially or completely located outside the uterine cavity, may extend into broad ligament and they are associated with much higher morbidity and mortality compared to tubal ectopic pregnancies. In view of that we believe that it is reasonable to label these pregnancies as ectopic which has also been endorsed by the RCOG guideline on the diagnosis and management of ectopic pregnancies and by the clinicians who took part in this Delphi consensus. The terminology is important to ensure that there is a consistency in reporting the outcomes of clinical studies and trials. The management evolves with time and it would not have been

			clinically important, although technically “ectopic” nomenclature Iis important and can lead to misinterpretation “in the field” even if scientifically correct. I am aware of two maternal deaths in the United States where after an ultrasound report used the word “ectopic”, calling it a C-section scar ectopic, where upon the clinician then employed a protocol that had been developed for garden-variety tubal ectopics. My strong advice is to call cervical pregnancies exactly that – cervical pregnancy or interstitial pregnancy – interstitial or C-section scar pregnancy a C-section scar pregnancy and NOT use the nomenclature of cervical ectopic, interstitial ectopic, or C-section scar ectopic, mainly because I believe nomenclature must be tied to management. I have no problem trying to educate healthcare providers about how to differentiate, for instance, between a cervical pregnancy and an aborting pregnancy passing thru the cervix pass, or implantation in a C-section scar versus low anterior implantation in a patient with a previous C-section, or true interstitial pregnancy versus an eccentric implantation especially in an arcuate uterus with a high lateral implantation. But if ESHRE wants a document on ectopic pregnancy it should be on diagnosis AND management not simply terminology for ultrasound definitions, which as stated above may actually mislead less learned clinicians. I realize these comments may not be popular but consider the healthcare providers “in the trenches“ who need good guidance on every day real life situations which I believe goes beyond simply nomenclature.	practical to cover this topic as well within the scope of this survey.
Ulrike Metzger			I agree with all definitions. Excellent iconography. Very clear and useful. Thank you very much.	Thank you very much.
Gangaraju Buvaneswari			The document is absolutely fine	Thank you.
Carlos Calhaz-Jorge			General comment: Congratulations to the authors for the excellent text. Just a couple of minor comments	Thank you.
Ali Sami Gurbuz			Pregnancy is a dynamic process. Terms should undergo changes as less as possible while designating early pregnancy when this dynamic process is considered.	We agree. Our terminology is applicable to use at any gestation.

Ali Sami Gurbuz			The characteristics of ultrasound device should be indicated in this document in the same manner with International evidence-based guideline for the assessment and management of polycystic ovary syndrome 2018 .	Thank you for this comment. Different ultrasound techniques which could be used to examine early pregnancies are mentioned in the discussion.
Lukasz Polanski and colleagues			Thank you for the effort put into the work proposing a new and unified approach to terming normally sited and ectopic pregnancies. The effort put into the work was substantial and the proposed terminology would introduce a standard nomenclature to the early pregnancy scanning environment. It is reassuring that the questionnaires were sent to a wide range of specialists in early pregnancy scanning throughout the globe and that there was a significant consensus amongst them and the Working Group (WG) on most proposed terms. Having reviewed the paper proposing the revised nomenclature, we provide some points of feedback:	Thank you for this comment.
ISUOG			The premise for this 'terminology' statement is that 'there has been little work on refining the criteria for the diagnosis of pregnancy location and differentiating between normally and abnormally sited pregnancies'. I think this is principle is a good initiative however I have concerns about the methodology. A Delphi consensus amongst 'experts' in early pregnancy may well have achieved a better outcome compared to a survey filled in predominantly by OBGYN generalists. '.....204 that completed the entire survey. The latter consisted of gynecologists and obstetricians (91%), nurses and midwives (3%) and other professions (6%).' The premise that OBGYNs actually know what they are talking about is nonsense.....from my experience in the UK, most OBGYNs do not even know the difference between a PUL and an ectopic pregnancy. If the survey had included individuals with specific experience in EPAUs then that would strengthen their ESHRE terminology document. Consequently this then puts this statement in the hands of very few early pregnancy experts.	Thank you for these comments. The majority of panel members have high level of expertise in early pregnancy and the document has undergone wide stakeholder review process which included many clinicians with expertise in the diagnosis and management of early pregnancy complications.

Attilio Di Spiezio Sardo	2	50	add definition of level of agreement	The level of agreement for all questions where a Likert scale of agreement was used, is described in Table 1.
Attilio Di Spiezio Sardo	2	50-51	List the responders and how the survey was sent	The survey was anonymous and sent by email to members of the SIG Implantation and Early Pregnancy and the committee of national representatives as explained in the methods section of the paper.
Lorenzo Abad de Velasco	2	54	54 papers, a stakeholder review was organized. ESHRE members, and re p…resentatives…	Thank you. We have amended the text according to your suggestion
Introduction				
Kumaran Aswathy	1	9-13	Main objectives To confirm presence of pregnancy- its number, location and live/failing To confirm dating To assess the chance of it being healthy ie ability to cross first trimester To assess coexisting intrauterine pathology To assess co existing pelvic pathology	Thank you for this comment. We decided to refer to the main clinical objectives when women present with suspected early pregnancy complications, but we agree that there are many more that could have been listed.
Ulrike Metzger	1	10	1) I would suggest: to confirm the number of pregnancies and their location (stressing that, particularly in a fertility treatment context, the examiner should not stop the exam when one pregnancy has been located (also Page 3 line 95-98)	We have amended the text as suggested.
Annick Geril	1	10	1) To confirm the location and the number of the pregnancy/pregnancies	Thank you. We have revised this statement taking into account your comments.
ISUOG	1	10-11	Objective 1 and 2 appear the same. Identifying location is in order to identify an ectopic, whether the ectopic is uterine or not	Thank you for this comment. We have amended the text according to your suggestion.
ISUOG	1	10-14	About early pregnancy ultrasound objectives: In normally implanted pregnancies the objectives also include: viability, establishment of gestational age and number of embryos (single or multiple), as per ISUOG first trim guidelines. It is also mentioned in line 97 the importance of early pregnancy	Thank you for this comment. We decided to refer to the main clinical objectives when women present with suspected early pregnancy complications, but we agree that

			scan to diagnose multiple pregnancies. Why not include them also as objectives from early pregnancy scan?	there are many more that could have been listed.
Ulrike Metzger	1	11	3) I would also suggest: adding as a main objective, in case of normally sited live pregnancy with potential to develop, to estimate the date of conception (to schedule le 11-13 weeks scan) and to determine, if possible, the chorionicity a normally sited multiple pregnancy	These are important points for clinical practice, but we do not think that they are essential when discussing terminology to describe the location of pregnancy.
Roy Farquharson	1	11	Should 3) not mention viability rather than prediction to develop further? A heartbeat is what all couples want to see and is the prime reward of having a stressful T1 scan.	Thank you for this comment. We discussed the terms 'live' and 'viability' extensively during our expert group meetings. There was a clear consensus to use term live in line with the obstetric practice where pregnancies are labelled as potentially viable after completed 24 weeks' gestation. Unfortunately, the presence of a heart beat is only one aspect of assessing embryonic health in early pregnancy. The heart rate is equally important as bradycardia is recognised as a very powerful predictor of miscarriage
Lukasz Polanski and colleagues	1	11-13	We believe that apart from providing information on the location of a pregnancy, we also gain information on 1. on viability depending on gestation at presentation ,2. is this a single or multiple pregnancy? We are not sure that the claim, 'that it is possible to give absolute information about the fate of a pregnancy specially if the scan is performed very early', is quite correct and can be misleading. It would be advisable to re-iterate that an ectopic pregnancy carries a certain risk to the mother and clarifying risk may falsely re-assure patients and pose a threat to patients' safety.	Thank you for this comment. We decided to refer to the main clinical objectives when women present with suspected early pregnancy complications, but we agree that there are many more that could have been listed and we have added the number of pregnancies to the objectives.
Attilio Di Spiezio Sardo	1	10-12	Please add also the importance of early ultrasound in women prior to cesarean delivery	Apologies, but we do not understand this point. These recommendations apply to all women scanned in early pregnancy, irrespective of whether they will have a LSCS for delivery.

Ali Sami Gurbuz	1	17	‘’Scanning neutral positioned uterus through transvaginal ultrasound is quite harder than transabdominal.’’ Sentence can be added.	Thank you for this comment, but these technical issues were beyond the scope of our paper.
Snezana Vidakovic			Suggestion: to include correlation between US scan and hCG.	Thank you. We have mentioned that transabdominal scan may be required in some cases (line 17).
Melinda Mitranovici	1	18	Other pelvic tumors can interfere with visibility of pregnancy	Thank you. This is correct, but it would not change the terminology.
Snezana Vidakovic	1	18	Transabdominal scan may also be needed when adhesions are fixing ovaries in upper parts of the pelvis, above linea inominata	Thank you. We have mentioned that transabdominal scan may be required in some cases (line 17).
Wen Jui Yang	1	17-19	Cases with vaginal spasm also indicate to use transabdominal scan.	We are grateful for this comment. Your points are important, but they are outside the scope of this project.
Lorenzo Abad de Velasco	1	25	Following that,	Thank you. This was adjusted.
Gangaraju Buvaneswari			Being an infertilty society we must include number of pregnancies or sacs, as more IVF multiple pregnancies are reported.	We agree and we have amended the text to include the number of pregnancies in the main objectives of ultrasound examination in pregnancy.
Results				
Attilio Di Spiezio Sardo	2	57	I would add a flow chart of responders	We are not sure that adding a flow chart of responders would add significant information.
Attilio Di Spiezio Sardo	2	58	Add country of responders	The distribution of respondents over the different countries is included in the first paragraph of the results section of the paper.
Attilio Di Spiezio Sardo	2	70-71	define "high" level of agreement	The level of agreement for all questions where a Likert scale of agreement was used, is described in Table 1.
ISUOG	2	74-77	Would be interesting to see full breakdown in the table for all questions	This may be helpful, but the working group feels that it would make the paper too lengthy.

Ali Sami Gurbuz	3	85	Pregnancy unknown location (PUL) should be currently defined. Rather than defining depending on urine test, BHCG or embryo transfer day or insemination day should be considered depending on consensus' decision.	Thank you for this comment. We decided to use the standard definition of PUL which is applicable to both spontaneous pregnancies and to those which occurred after ART.
Onur Erol	3	85-87	In my opinion, definition of pregnancy of unknown location (PUL) should be corrected as ' this term is reserved for when no pregnancy is visualised on transvaginal ultrasound scan in clinically stable women with a positive blood pregnancy test (preferably quantitative). While urine pregnancy testing (about %97-99 accurate if used correctly) is theoretically available in most of the public health facilities, a quantitative blood test, that measures the exact amount of hCG, is more accurate compared to urine test in obstetric practice.	Thank you for this comment. We are not aware of the value of preforming a blood test to quantify hCG levels in women with negative urine pregnancy test and, as far as we know this cannot be considered a standard practice.
Kumaran Aswathy	3	85-89	Pregnancy of unknown location is ideally defined when we are unable to locate USG evidence of pregnancy even though the serum BhCG levels are above the discriminatory zone. A too early pregnancy may not show any evidence on ultrasound even though the UPT is positive when BhCG is below the discriminatory zone. But to comment that as PUL seems inappropriate. In such a case, if we do not do the BhCG level, a better way to report would be--No definite sonological evidence of pregnancy noted at present, to correlate clinically- and suggest a suitable day for follow up or do a BhCG trend assessment. This is especially relevant in reporting the first ultrasound in a patient where we do not yet know the potential for further development Concept of discriminatory zone of BhCG and how it correlates with the sonological evidence of pregnancy needs to be included in the definition as well as description of PUL. Ideally bhcg trend in 24 hrs should be correlated with USG The discriminatory zone is the range of serum β-hCG concentrations above which a gestational sac can be visualized consistently.	Thank you. As stated in the document the management of PUL was beyond the scope of this project.
ISUOG	2	90-93	Persistent PUL (PPUL) is rare and likely due to ectopic or failed normally-sited pregnancies that cannot be visualized with ultrasound, but is an outcome that many units still require to direct triage and management planning	Thank you. As stated in the document the management of PUL was beyond the scope of this project.
Kumaran Aswathy	3	95-98	Requires more clarity- may be modified as suggested It should be noted that in case of more than one pregnancy, they can be: 1)	Thank you. We have amended the text according to your suggestion.

			both or all normally sited (twin, triplet, etc.) 2) one/more normally-sited and one/more ectopic (heterotopic) or 3) all or both in abnormal locations (co-existent ectopic pregnancies)	
Gangaraju Buvaneswari	3	96	About heterotrophic pregnancy - how do we report it? As both eutopic and ectopic or the same name?	This has been covered in the text (Page 3, Line 96).
1. Normally-sited pregnancy				
Lukasz Polanski and colleagues	4-6	103 - 157	We agree that the pregnancies that are located within the confines of the endometrial cavity should be termed normally sited or eutopic pregnancies. We believe the term eutopic is academic and although helpful to experts in understanding classification, it could lead to confusion due to the similarity to the word ectopic. The term normally sited is preferable since it would be clearer to clinicians, sonographers and patients. The term ectopic is widely used and accepted and it could be dangerous if this is mistaken for 'eutopic' or vice-versa for reasons stated above.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
ISUOG	4	108 - 110	Would it be more accurate to change 'uterine cavity' to 'endometrial cavity' here?	Thank you. We have discussed your suggestion at length. The WG agreed to retain the term uterine cavity as most documents describing the uterine morphology tend to use it. However, we indicated in the text that 'endometrial cavity' could be used as an alternative.
Lukasz Polanski and colleagues	4	108 - 112	It would be preferable if the author amended their statement to reflect that it is misdiagnosis that causes clinical issues and delays in instigating treatment or ignoring clinical signs and not the nomenclature.	Thank you for this comment. However, misdiagnosis due to clinical errors and

				misinterpretation of ultrasound findings was beyond the scope of our project.
Roy Farquharson	4	113	While correct, it is not absolute as the peritoneal cavity can sustain a human pregnancy following spontaneous implantation until term in the absence of a uterus. (Looked after case in NZ)	Thank you for this comment. You are correct and in some cases of uterine and extrauterine ectopic pregnancies the fetus can develop normally and reach viability. The emphasis; however, is on the word pregnancy as in all these ectopic pregnancies it is the placenta which develops abnormally thus jeopardising the maternal health.
Monica Varma	4	125 - 126	'Outer myometrium' more commonly means the myometrium beyond the junctional zone. The word 'outer' may be omitted.	Thank you for this comment. You are correct, but we decided to use this terminology to make the point we were trying to make even more obvious.
Philippe Merviel	4	129	It should be emphasized in the Location chapter that pregnancy is implanted in the endometrium and is therefore out of step with the cavity line. This makes it possible not to take a pseudo-gestational salk for an intrauterine pregnancy.	We agree that this is an important consideration, but it was outside the scope of this project.
Attilio Di Spiezio Sardo	5	Fig 1	improve resolution	Fig. 1 has been replaced.
ISUOG	4	134 - 137	Terminology similar to 'Ectopic' is dangerous – if everyone is re-educated on Entopic/Eutopic, it only takes bad handwriting/typo on a scan report for clinical misunderstanding	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians to option to use one or both terms. If the term eutopic pregnancy becomes adopted

				in clinical practice the descriptive part would become superfluous.
ISUOG	5	141	Why can't 'normally sited intra-uterine pregnancy be used' as was most voted? It describes 'normal-site' which is the recommendation (within the uterine cavity (intra-uterine) with placental invasion not extending…), without eutopic/entopic	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians to option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
ISUOG	5	145	13% voted intrauterine but 11% voted normally sited. The majority (48%) used both terms	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians to option to use one or both terms. If the term eutopic pregnancy becomes adopted

				in clinical practice the descriptive part would become superfluous.
Carlos Calhaz-Jorge	5	149	The meaning of “eutopic” is clearly explicit in lines 136 and 137. Maybe a repetition not needed	Thank you. We have amended the text according to your suggestion
ISUOG	5	151	Eutopic/Entopic/Ectopic is confusing and any incidental miscommunication will place a patient in unnecessary danger	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians to option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
Aboubakr Mohamed Elnashar	5	152	A pregnancy which is located within the uterine cavity…. To be within normal uterine cavity. to exclude pregnancy in rudimentary horn	Thank you for this comment. We agree that the pregnancy within the rudimentary cornu is a special case and we discussed that in detail on page 16, line 423.
Dr. Nidaa	5	152	What about abnormally sited intrauterine pregnancy like cervical or intramural	They are mentioned later in the text.
Roy Farquharson	5	152	‘Entopic’ will mean a whole new word to disseminate alongside IUP but clearly a compromise worth supporting. Good that it is ESHRE-inspired!	Thank you for this positive comment.
Lorenzo Abad de Velasco	5	152	If “normaly sited” and “eutopic” are sinonimous, we might use just one of them.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of

				the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
Mohamed Shahin	5	152	Can we avoid the term (eutopic) as it is confusing and can easily lead to errors or misinterpretation, even reading it in a scan report can be easily read as (ectopic), especially when the clinician reading the report is not experienced in early pregnancy and recent updates. Can we just describe it as: (Normally-sited “intrauterine” pregnancy), which is what most (48%) of respondents indicated. I agree that only 13% only wanted to keep the term “intrauterine pregnancy” because they are well aware of intramural, cervical, CS scar pregnancy, but more respondents prefer : Normally-sited “intrauterine” pregnancy. The way the date presented seems to be manipulating the facts to reach a conclusion that seems to be agreed regardless of the feedback or the survey data.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
Mohsen M El-Sayed	5	152	A pregnancy which is located within the uterine cavity, should be classified as normally-sited pregnancy. Omit (eutopic) as it rhymes with ectopic and may cause confusion when heard.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and

				eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
Lukasz Polanski and colleagues	6	157	In a normally sited uterine pregnancy where the heartbeat is not visible, it would be preferable to use the term early or of indeterminate viability.	Thank you for this comment. We agree and we adopted the term early to describe small eutopic pregnancies with no visible embryo.
ISUOG	6	158 - 164	Can live and viable both be used if there is cardiac activity	Thank you for this comment. We discussed the terms 'live' and 'viability' extensively during the meeting of the expert group. There was a clear consensus to use term live in line with the obstetric practice where pregnancies are labelled as potentially viable after completed 24 weeks' gestation.
Roy Farquharson	6	159	Deletion of viable is a big step. You make the obstetric threshold as the key difference to 'live' – have you considered the patient might see the two words as synonymous?	Thank you for this comment. We discussed the terms 'live' and 'viability' extensively during our expert group meetings. There was a clear consensus to use term live in line with the obstetric practice where pregnancies are labelled as potentially viable after completed 24 weeks' gestation. Unfortunately, the presence of a heartbeat is only one aspect of assessing embryonic health in early pregnancy. The heart rate is equally important as bradycardia is recognised as a very powerful predictor of miscarriage.

Kumaran Aswathy	6	162	Wouldn't the term normally-situated be better than normally-sited?	Thank you for this comment. However, a consensus has been reached to use the term normally sited.
Mohamed Shahin	6	168	Can we avoid the term (eutopic) as it is confusing and can easily lead to errors or misinterpretation, even reading it in a scan report can be easily read as (ectopic), especially when the clinician reading the report is not experienced in early pregnancy and recent updates. Can it be: Live normally-sited "intrauterine" pregnancy.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
Roy Farquharson	6	168 - 169	ALERT Entopic or eutopic?? Which one is it? Plus The difference of one letter n or u in a new word could be difficult to adopt given human error rates in written reports.	Thank you for this valid comment. We had a long discussion regarding this issue and the majority opinion was to adopt the term eutopic as it sounded more different from ectopic compared to entopic.
Dr. Nidaa	6	169	It is better to put (not yet visualised cardiac activity)	Thank you. This is implied by the previous statement.
Mohamed Shahin	6	169	Can we avoid the term (eutopic) as it is confusing and can easily lead to errors or misinterpretation, even reading it in a scan report can be easily read as (ectopic), especially when the clinician reading the report is not experienced in early pregnancy and recent updates. Can it be: Early normally-sited "intrauterine" pregnancy.	Thank you. We discussed this issue at length. We recognised that there is a need to have a single term to describe a healthy pregnancy developing within the uterine cavity. However, there was a reluctance at the survey to adopt such a radical change and some members of the committee felt that both entopic and

				eutopic pregnancy sounded too similar to ectopic. In view of that we decided to provide a compromise which includes both the description (a live normally-sited pregnancy) and the term (eutopic) itself. This gives clinicians the option to use one or both terms. If the term eutopic pregnancy becomes adopted in clinical practice the descriptive part would become superfluous.
ISUOG	6	169	Normally sited intrauterine pregnancy of unknown viability carries the onus that a final outcome has not yet been confirmed and follow up is required which is important. All these pregnancies are early	Thank you. We felt that the term 'early' is more appropriate. Classifying a pregnancy as being of uncertain viability necessitates that all women will need follow-up to confirm viability, which is not the case if the woman genuinely presents too early for a fetus with a heartbeat to be visualised. We also felt that it conveys a more positive to message to women than 'pregnancy of unknown viability'. If a woman is classified as having an early pregnancy on scan and this does not fit in with her menstrual dates, she should of course be counselled about the risk of miscarriage. However, we have modified the text to refer to the term 'pregnancy of uncertain viability' which has been used by some authors.

ISUOG	6	169 - 171	In relation to pregnancies when it is not yet possible to visualise a foetus with embryonic / foetal cardiac activity: What happens with the term intrauterine pregnancy of unknown viability (IPUV)? The consensus will change and not use anymore “unknown viability” and just say too early? Or early normally-sited (eutopic) pregnancy? I suggest to discuss or add a comment about this and clarify why not use anymore IPUV. This consensus about the term early normally-sited pregnancy was based in the discussion of the WG? Maybe clarify that point, because it was not asked in the survey. Is there any reason why it was not asked?	Thank you. We felt that the term 'early' is more appropriate. Classifying a pregnancy as being of uncertain viability necessitates that all women will need follow-up to confirm viability, which is not the case if the woman genuinely presents too early for a fetus with a heartbeat to be visualised. We also felt that it conveys a more positive message to women than 'pregnancy of unknown viability'. If a woman is classified as having an early pregnancy on scan and this does not fit in with her menstrual dates, she should of course be counselled about the risk of miscarriage. However, we have modified the text to refer to the term 'pregnancy of uncertain viability' which has been used by some authors.
Attilio Di Spiezio Sardo	6	171	MISCARRIAGE: add definition of miscarriage (with gestational age limit) and abortion, and early pregnancy loss. Miscarriage is different from stillbirth, or perinatal loss or intrauterine fetal death. Usually miscarriage is defined as abortion before 20 weeks. Early pregnancy loss is abortion before 12 weeks. Abortion is a general term. Stillbirth is IUFD after 22 weeks. A non-viable fetus is a perinatal loss.	We have amended the text as suggested.
Philippe Merviel	6	171	Chapter miscarriage: be careful not to declare a pregnancy terminated too quickly. This is true if a heart activity was visible and no longer visible, if an intrauterine pregnancy was visible and is no longer visible. But beware of the evolution of hCG in early pregnancy, which does not double every 48 hours from the beginning, just as a gestational sac can have a slow growth at the beginning, or even an embryo smaller and less evolutionary at the beginning of pregnancy, without it being stopped.	We are grateful for this comment. Your points are important, but they are outside the scope of this project.
Kumaran Aswathy	6	175 - 182	The term abnormal pregnancy does not seem appropriate to describe a failed pregnancy as is suggested by the term, miscarriage. The term miscarriage describes a normally-sited eutopic pregnancy that is no longer live	Thank you for this comment. We have amended the definition of miscarriage based on your feedback.

			The terminology is confusing, so I suggest that we use that the term failed pregnancy or something else more appropriate rather than using the ambiguous terminology - abnormal pregnancy in the descriptive part of draft. An abnormal pregnancy may suggest anomalous pregnancy even though it is living or something even like vesicular mole. "This abnormal development does not include fetal or genetic abnormalities" sentence (179-180)- of the draft does not clear the ambiguity	
ISUOG	6	178	Agree that miscarriage should only be used for normally sited intra-uterine pregnancies	Thank you.
ISUOG	6	179 - 180	You will not know if there is fetal or genetic abnormalities unless, post management, there is tissue for analysis	Thank you, but this issue was beyond the scope of our project.
Attilio Di Spiezio Sardo	6	182	any disagreement on miscarriage? Any one prefer abortion or early pregnancy loss? Can abortion be used for an ectopic pregnancy? Or only failing ectopic pregnancy. What about the term tubal abortion? Differences with complete tubal abortion?	We decided to use the term miscarriage as the term abortion is nowadays mainly used for termination of pregnancy. We were keen to use the term miscarriage to define both the normal location of pregnancy and abnormal development. In view of that we agreed to advise against the use of term miscarriage when referring to a failing tubal pregnancy.
Lukasz Polanski and colleagues	6	182	The term miscarriage is widely accepted as a non-viable, non-progressing pregnancy - 'abnormal development' is confusing and the word abnormal may cause distress and confusion to patients. This could lead to the misunderstanding that there is a possibility of congenital abnormality. We believe that the term 'abnormal development' be clarified to state that the pregnancy is 1. Inconsistent with dates (if known accurately; IVF pregnancies for instance); 2. Is meeting the criteria for ultrasound diagnosis of miscarriage; 3. Where a normally sited pregnancy was seen on a prior scan, no evidence of such pregnancy can be found on the current scan (with a positive pregnancy test). A possible alternative could be 'not progressing pregnancy' or pregnancy with 'arrested development'.	Thank you for these helpful comments. We have re-written the definition of miscarriage taking into account your feedback.

Lukasz Polanski and colleagues	7	199 - 211	We believe that a failing ectopic pregnancy is a different entity to a tubal abortion/miscarriage. The former is likely to require active management with BHCG levels that are declining (ongoing process). Whereas a tubal miscarriage points towards a completed process that may not require active monitoring since we have demonstrated non-active trophoblastic activity by low levels of BHCG. Within the proposed terminology, it is also mentioned that the ectopic pregnancy with an 'abnormal development' should be termed a failing ectopic pregnancy. We believe more clarification of the 'abnormal development' of an ectopic pregnancy is necessary, as most of ectopic pregnancies do not have a normal development; hence they fail more regularly than normally sited pregnancies.	Thank you. We have amended the definition of failing ectopic taking your comments into account.
2. Ectopic pregnancies				
ISUOG	6	186	I feel the consensus statement is too vague here – diagnosing a 'miscarriage' is a very specific diagnosis, as it should be, to avoid misdiagnosis. There are clear criteria that have been published to make this diagnosis and should be referenced here. Describing it here as being associated with 'abnormal development' may lose that important message.	Thank you, we have revised the definition of miscarriage taking your comments into consideration.
ISUOG	7	192	Again, 'endometrial cavity' may be more accurate than 'uterine cavity'	Thank you. We have discussed your suggestion at length. The WG agreed to retain the term uterine cavity as most documents describing the uterine morphology tend to use it. However, we indicated in the text that 'endometrial cavity' could be used as an alternative.
ISUOG	7	196	I understand the reference to CS and myomectomy but is the evidence robust enough for the statement re relationship to operative hysteroscopy? Perhaps a reference should be included here.	We stipulated that any myometrial trauma could result in scarring which may predispose women to developing uterine ectopic pregnancies.
Philippe Merviel	7	198	Chapter failing ectopic pregnancy: Attention failing does not mean that ectopic pregnancy is no longer evolutionary, as the trophoblast can continue to harm the tubal wall. I remember the case of a woman with a ruptured GEU and a massive hemoperitoine and hCG at 17 IU/l.	We agree that clinical course of ectopic pregnancy is not always possible to predict. However, in routine practice the clinicians sometimes wish to communicate their

				impression that ectopic pregnancy is in the process of regression. Our recommendation is that in such situations they should avoid using the term 'miscarriage' and refer to failing ectopic instead.
Roy Farquharson	7	200	Live ectopic pregnancy is good to adopt as it can lead to catastrophic consequences.	Thank you.
ISUOG	7	200	Agree with this definition	Thank you.
ISUOG	7	204 - 207	'Failing' ectopic pregnancies should be an objective diagnosis using objective indicators over time. All ectopic pregnancies not live are diagnosed using ultrasound and are managed either expectantly, medically or surgically based on symptoms, bloods and USS findings. We only know an ectopic is 'failing' from serial blood results and requires longitudinal data.	Thank you. We have revised the definition of failing ectopic pregnancy taking your comments into consideration.
Kumaran Aswathy	7	200 - 209	Again, here, abnormal pregnancy or the terminology abnormal development does not mean that the pregnancy is failing although in the draft hey it has been meant in that way. This can cause confusion.	Thank you for this comment. However, a consensus has been reached to use 'failing ectopic pregnancies' to describe an ectopic pregnancy with abnormal development.
Roy Farquharson	7	210	Asking for consistency. Why is ectopic retained when eutopic is described at length at beginning? You are vacillating between modernising and staying the same!	Thank you. We were hoping that like 'miscarriage ' we could use one simple term to specify both location and viability of the pregnancy - so eutopic and entopic were discussed. However, there were concerns about their similarity to the word ectopic. Ectopic is however, like miscarriage, widely used and accepted, so we have continued to use it. We are hoping with time that the word eutopic will become accepted.
Lukasz Polanski and colleagues	7	210	We agree that an ectopic pregnancy which contains an embryo with a cardiac pulsation should be termed a live ectopic pregnancy.	Thank you.
Ali Sami Gurbuz	7	210 - 212	Live–failing ectopic pregnancy differenciation is not necessarily important due to dynamic process. Either live ectopic pregnancy can switch to failing pregnancy within few days or failing can switch to live.	We appreciate your comment. However, most live ectopic pregnancies will require active

				treatment and failing pregnancies cannot become live.
Dr. Nidaa	7	211	Acutally, I can't understand this paragraph (should be more clear), it's not really clear in regards to abnormal development	The paragraph provides the reasons for not using the term 'tubal miscarriage' in clinical practice.
Snezana Vidakovic	7	211	Is “failing ectopic pregnancy” a pregnancy without cardiac activity regardless the hCG blood level ?	Thank you. We have revised this statement taking into account your comments.
Monica Varma	7	211 box	Perhaps needs more clarification 1. A failing ectopic pregnancy is in relation to falling βhCG (as mentioned in line 204) 2. An ectopic pregnancy without cardiac activity (abnormal development) as such is not always a failing ectopic pregnancy as βhCG levels do rise without the appearance of cardiac activity or the cardiac activity may appear later 3. May be better to classify as live/ absent cardiac activity rather than normal /abnormal ectopic pregnancy as it is the presence of cardiac activity that mainly effects the management options 4. The box consensus may be rewritten –Ectopic pregnancy with abnormal development and falling βhCG levels should be described as failing ectopic pregnancy if abnormal development is a diagnostic feature of relevance for the management planning.	Thank you for these helpful comments. We have re-written the definition of failing pregnancy taking into account your feedback.
Onur Erol	7	211 - 212	It is better to specify feature of abnormal development of ectopic pregnancy Ectopic pregnancy with abnormal development (absent of embryonic or foetal cardiac activity) should be described as failing ectopic pregnancy if abnormal development is a diagnostic feature of relevance for the management planning	Thank you. This was adjusted.
Kumaran Aswathy	7	211 - 212	Ectopic pregnancy with features of regression should be described as failing ectopic pregnancy if this is a diagnostic feature relevant for planning management- this seems a simpler and more understandable way to present the statement	Thank you. We have revised this statement taking into account your comments.
ISUOG	7	215	The consensus statement should mention that a ‘failing’ ectopic pregnancy has reducing hCG / biomarker levels. The term ‘abnormal development’ is a little vague.	Thank you. We have revised the definition of failing ectopic pregnancy taking your comments into consideration.

Lorenzo Abad de Velasco	7	217	… where the exact location of the pregnancy (as it refers to something concrete –the gestationalsac-, rather than to the state of being pregnant itself)	Thank you. We have amended the text according to your suggestion.
Lukasz Polanski and colleagues	7	218	With regards to the location of ectopic pregnancies and the offered management (line 218), there is no mention of medical management, which may be an option for some. This option should be added.	Thank you. We refer to conservative (non-surgical) management which could be expectant or medical.
Onur Erol	8	222	Subheading should be uterine and extra uterine ectopic pregnancies	Thank you. This was adjusted.
ISUOG	8	232	Agree with uterine ectopic pregnancies but given that 97% of ectopic pregnancy is tubal, grouping tubal, ovarian etc as extrauterine may add uncertainty to the extrauterine location. I do not see why the extrauterine pregnancies need to be grouped as such.	We discussed this issue at length, and we felt that grouping ectopic pregnancies as uterine and extrauterine is logical and would be helpful in clinical practice.
Lukasz Polanski and colleagues	8	234	We agree that ectopic pregnancies should be classified as uterine or extrauterine with the abolition of the previous terms of tubal and non-tubal pregnancies.	Thank you.
Ali Sami Gurbuz	8	234 - 236	Division of ectopic pregnancy as uterin and extrauterin leads to confusion. Instead of this classification, cervical, ceseraen scar, intramural, cornual, tubal, abdominal and ovarian ectopic pregnancy can be distinguished.	Thank you for this comment. However, a consensus has been reached to divide ectopic pregnancies into uterine and extrauterine.
Philippe Merviel	8	237	Thank you for clarifying (and removing) the notion of angular pregnancy. In fact it is a pregnancy in the horn of a normal uterus (different from cornuale) that can be scalable and safe, unlike pregnancies on rudimentary horn or interstitial (extrauterine) tubal pregnancies.	Thank you for this comment.
Carlos Calhaz-Jorge	8	241	"cornual pregnancy" here seems to have the classical meaning of "in the uterine horn" quite different from the detailed explanation starting in line 419. Can you please clarify?	We have removed reference to cornual pregnancy on page 8.
Carlos Calhaz-Jorge	8	242	"…there are no accepted agreed sonographic…". I guess that either "accepted" or "agreed" must be removed.	Thank you. We have amended the text according to your suggestion.
Carlos Calhaz-Jorge	8	243 - 244	All the sentence gives no relevant information for terminology. Maybe can be removed.	The purpose of this statement is to emphasise that lateral location of pregnancy is a transient finding which is often present in the early first trimester and it more often recorded if the scans are carried out early.

ISUOG	8	244 - 249	Agree that laterally implanted pregnancies are not a form of ectopic but are useful for the MDT in the units to be aware of	Thank you for this comment.
Dr. Nidaa	8	253	totally agreed	Thank you.
Roy Farquharson	8	253	Glad that Angular Pregnancy is abandoned as a term	Thank you.
Lukasz Polanski and colleagues	9	255	We have concerns regarding the discontinuation of the term 'angular pregnancy' which denotes a high, off- midline implantation within the confines of the endometrial cavity. Early scans are likely to detect this and we would ask you to reconsider removing this term completely from the early pregnancy scanning terminology, especially if specialist equipment (3D ultrasound) or expertise is lacking and need for second opinion is sought. Outcome of angular pregnancy in such location should be studied further.	The committee did review the evidence and it was unanimous in deciding that laterally implanted pregnancies are not associated with increased risk of adverse outcomes and that the term 'angular' pregnancy should be abandoned.
Mohamed Shahin	9	255	The problem that an average sonographer can confuse an interstitial with angular pregnancy, hence the need to keep this term to reassure when asked for a second opinion, as otherwise it will appear as it there is a significant disagreement between first and second opinions without clear explanation. Without a lot of education, removing the term "angular" pregnancy can cause harm rather than good.	The working group did review the evidence and it was unanimous in deciding that laterally implanted pregnancies are not associated with increased risk of adverse outcomes and that the term 'angular' pregnancy should be abandoned.
Philippe Merviel	9	257	I would not distinguish by the partial or complete side, because for me the risk is similar because when there is still trophoblast on a partial pregnancy (after a curettage for example), the risk of evolution of it is real.	The main rationale for dividing uterine ectopic pregnancies into partial and complete was to facilitate their selection for either conservative or surgical management.
ISUOG	9	257 - 267	Does complete and partial classification objectively dictate safe course of management for each?	No, it just indicates what management options are available in a particular case.
Monica Varma	9	262	1. Does classifying interstitial ectopic pregnancies as complete or partial make any difference in management?' 2. If it does then does it need to be added in the box –All uterine ectopics (cervical, Caesarean scar and intramural) and interstitial ectopics should be described as partial or complete?	Thank you for this comment. Classifying interstitial pregnancies as complete and partial is important when planning management and we have expanded the section on interstitial pregnancy and amended the classification.

Aboubakr Mohamed Elnashar	9	267	Partial Caesarean scar ectopic pregnancy should be differentiated into two types endogenic or type one if protruding inward toward the cervicoisthmus space and exogenic or type 2 if protruding outward toward the bladder& abdominal wall. This is important in counseling on expectant management and determining optimal	The terms partial and complete refer to the presence or absence of pregnancy which is communicating with the uterine cavity or cervical canal. The degree of extension outside the uterine cavity/uterus is important to assess, but it is not critical when deciding of the management plan.
Dr. Nidaa	9	267	What about the exact location for the intramural	We are sorry, but we do not understand the question.
Lukasz Polanski and colleagues	9	267	We agree that uterine ectopic should be termed partial or complete.	Thank you.
Grigorios Derdelis	9	267	Consensus might be difficult to interpret or clinically misleading. More helpful would be the percentage of partial/mural etc	Thank you. Complete uterine ectopic pregnancies are entirely confined to the myometrium and therefore not accessible transcervically. All other pregnancies are partial regardless of the extent of myometrial involvement. In view of that there is no need to quantify the extent of myometrial involvement in partial ectopic pregnancies.
Ali Sami Gurbuz	9	267	Because differenciation of uterin ectopic pregnancy as partial or complete is subjective and will not change management it is unnecessary.	Thank you again. The differentiation between partial and complete ectopic pregnancies is important for planning management and there was a consensus to keep it.
2.1 Uterine ectopic pregnancies				
Ilan Timor	9	269 - 278	This paragraph sould be or removed or extensively rewritten. Use Vial's or Comsstocks definition if you opose my definition of "on the scar" (with a better outcome usually) and "in the niche" (more ominous outcome with more severe PAS) . Please look at our latest article predictong PAS severity by first trimester US. HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Cal%C3%AD%20G%5BAuthor%	We are grateful for this comment. Your points are important, but they are largely outside the scope of this project. We have however, made additional references to your work when discussing the lack of universally accepted criteria to diagnose scar pregnancies.

			5D&cauthor=true&cauthor_uid=31788885" Calí G1,2, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Timor-Tritsch%20IE%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Timor-Tritsch IE3, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Forlani%20F%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Forlani F2, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Palacios-Jaraquemada%20J%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Palacios-Jaraquemada J4, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Monteagudo%20A%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Monteagudo A5, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Kaelin%20Agten%20A%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Kaelin Agten A6, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Flacco%20ME%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Flacco ME7, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Khalil%20A%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Khalil A6,8, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Buca%20D%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Buca D9, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Manzoli%20L%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Manzoli L7, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Liberati%20M%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" Liberati M9, HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=D'Antonio%20F%5BAuthor%5D&cauthor=true&cauthor_uid=31788885" D'Antonio F10. Value of first-trimester ultrasound in prediction of third-trimester sonographic stage of placenta accreta spectrum disorder and surgical outcome. HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/31788885"Ultrasound Obstet Gynecol. 2020 Apr;55(4):450-459. doi: 10.1002/uog.21939.	
Prof. dr. J.A.F. Huirne	9	281 - 283	Within the niche taskforcegroup a CSP was defined by Jordans et all (submitted/under review) as all pregnancies that inplanted near/on or in the Caesaeran Scar.	Thank you for this comment. Unfortunately, it would be difficult to include reference to a paper which has not been peer reviewed as yet.

Ilan Timor	9	285	1. To what gestational age does this definition apply? There is a difference between 5-7 and 7+to 11-12 weeks. Please refer to the articles A and B I added at the end of the references, Between 5-7 weeks the location of the sac is important to the diagnosis, after that the location of the placenta, the proximity of it to the anterior uterine surface/bladder determine the diagnosis. The position of the sac is less relevant since together with the embryo it gradually moves up to populate the uterine cavity. This is where most OB/GYNs and even MFMs misdiagnose the pregnancy reassuring the patient of having a NORMAL IUP disregarding the low anterior placental insertion (and also the possible previa).	Thank you for this comment. Our definitions are applicable to any gestation. Our definition of pregnancy extending outside the uterine cavity covers all scenarios described in your comments.
Prof. dr. J.A.F. Huirne	9	285 - 288	Most Caesarean scar pregnancies are partial (type 1, according to Jordans et al., submitted/under review) which facilitates their transcervical surgical evacuation (Fig. 2). Complete scar pregnancies (type 2A and 2B CSP, according to Jordans et al., submitted/under review) are rare, and they tend to bulge into the broad ligament or into the vesico-uterine space (type 2B, according Jordans et al.) (Fig. 3).	Our definition of partial and complete Caesarean scar pregnancies does not correspond to your description of Type 1 and Type 2 pregnancies.
Carlos Calhaz-Jorge	9	286	"which facilitates their transcervical surgical evacuation" seems management (which is explicitly avoided across the rest of the text). Maybe to be removed?	We included this sentence as the main rationale for dividing uterine ectopic into partial and complete is to facilitate their selection for either conservative or surgical management.
Ilan Timor	9	288	In addition here is hhow I describe the Scar pregnancy: CSP occurs when a blastocyst implants in a microscopic or macroscopic tract on the uterine scar or in the "niche" (or dehiscence) left behind by an incision site of the previous CD. The mechanism is the same after uterine surgery (curettage, myomectomy, endometrial ablation, manual removal of placenta, or any intrauterine surgical manipulation) with one significant difference: the latter causes are extremely rare (Fig. 1A, B). The difference between the "on the scar" and "in the niche" implantation is that in the first variety there is a measurable myometrial thickness between the placenta/gestational sac and the anterior uterine surface or the bladder, whereas in the second form the placenta/gestational sac complex is at close proximity to the bladder or the anterior uterine surface (see Fig. 1A, B). It seems that there is a difference in	We are grateful for this comment. Your points are very relevant; however, the diagnosis and management of caesarean scar pregnancy was not a key issue in his project.

			outcome between the two forms of implantation if the decision is to continue the pregnancy. (refer to my added reference C	
Monica Varma	9	288	Is it required to specify whether Caesarean scar pregnancies need to be classified as endogenic/ exogenic (as mentioned in the Society for Maternal-Fetal Medicine (SMFM) Consult Series # 49: Caesarean scar pregnancy Am J Obstet Gynecol. 2020 May;222(5):B2-B14. doi: 10.1016/j.ajog.2020.01.030. Whatever is the consensus of the Working Group may be mentioned	Thank you. We have expanded the discussion regarding the diagnosis of Caesarean scar pregnancy to include the reference to SMFM publication.
Monica Varma	9	288	Is there a need to mention that a caesarean scar ectopic pregnancy needs to be differentiated from pregnancies which implant 'on' the scar (Naji O et al Does the presence of a Caesarean section scar affect implantation site and early pregnancy outcome in women attending an early pregnancy assessment unit? Hum Reprod. 2013 Jun;28(6):1489-96. doi: 10.1093/humrep/det110..)	We agreed that only pregnancies which are implanted into Caesarean section scar should be classified as Caesarean scar pregnancies. The paper you refer to is focused on the site of intrauterine implantation in women with and without history of previous Caesarean section and not on the diagnosis of Caesarean scar ectopic pregnancy.
Ilan Timor	10	293	Here are the figures to be added to my previous comment: Could not appent the pictures to the comments. Will send separately.	Thank you.
ISUOG	10	293 - 297	Agree	Thank you.
ISUOG	10	294 - 295	I am not sure the schematic drawing (fig. 2a) is that clear/ helpful – the uterine cavity is disproportionate to the size represented by the cervix and the diagram does not really make the point the accompanying text is trying to make. A saggital section schematic would be more informative. Fig. 2b should be rotated 180 degrees as most TV sonographers scan the opposite way to this image. Both figures 2b and 2c should include a description of the section for clarity (saggital for 2b and coronal for 2c).	Thank you. We decided to use the images with the cervix at the bottom of the image as they correspond better to schematic drawings.
ISUOG	10	296 - 297	Similar comments to figure 2	Thank you. We decided to use the images with the cervix at the bottom of the image as they correspond better to schematic drawings.
Ilan Timor	10	297	For a multitude of reasons cesarean scar pregnanct IS NOT AN ECTOPIC PREGNANCY and i strongly suggest removing it from this section. First, most of	We are grateful for this comment and we discussed these issues at length. Any uterine

			them are the type "on the scar" or not "embedded" into the myometrium (you can call it anything you like, I call it "on the scar" and they clearly communicate with the cavity. In addition even the variety I call "in the nich" (endogenous?) which clearly is closer to the uterine surface, develops towards the uterine cavity. Third: contrary to the TRUE ectopics, CSP morphs into the cavity as it growth and after 9-19 weeks it is IN THE CAVITY (where else should it go?). Here is where most Ob/Gyns even MFMs reassure the patient that this is a NL IUP. Lastly, again, contrary to REAL ectopics, if continued and does not cause complications,, it results in a liveborn offspring. I suggest that these are strong facts that support removing CSP from the category that you placed it. Lastly (and it is typical) the reference list clearly and most probably deliberately ignores our group's extensive contribution to the subject of CSPs wit not quoting any of our at least 15 or more articles. Again; give in to reason, remove CSP from Ectopics. Slowly most of those who work in this field already realized this. You have the most prominent brains in the group, let the brains be used wisely.	ectopic pregnancy can result in a live birth and there are also cases of abdominal pregnancies progressing to full term. In our opinion ectopic pregnancy is any pregnancy which is developing outside the uterine cavity with adverse effect on maternal physical, emotional and social well-being. Caesarean scar pregnancy fulfils these criteria as much as cervical, interstitial, cornual or any ectopic pregnancy.
Onur Erol	11	304 - 307	The term cervical ectopic pregnancy should be used instead of cervical ectopics	Thank you. This was adjusted.
Carlos Calhaz-Jorge	11	308 - 309	Last sentence is again management. Is it helpful for the discussion of terminology?	Again, the purpose of this statement is not to discuss management but simply to emphasise many similarities between Caesarean and cervical pregnancies.
Alessandra Pipan	11	314 and following	In case of complete intramyometrial pregnancy , if no embryo visible, are ultrasound criteria for diagnosis and differential diagnosis clear and agreed? In case of partial: is the depth of implantation a prognostic factor? Is this pregnancy deemed to get complications?	Thank you for this comment. We have expanded the text to provide more information regarding the differential diagnosis between intramural pregnancy, cystic adenomyosis and fibroids. The depth of

				myometrial involvement is less relevant than the size in terms of prognosis.
ISUOG	11	317	The addition of a 3D image here would be additionally informative if possible	We have added a 3D image following your suggestion.
Melinda Mitranovici	11	318	Intramural pregnancies can occur after several intrauterine curettage without any perforation when this maneuver is abrasive.	Thank you for this comment.
Melinda Mitranovici	11	319	And because of the thickness of the uterine wall ,after abrasive curettage, in second trimester the intramural pregnancie could cause uterine rupture.	Thank you for this comment.
ISUOG	11	319	Fig. 5b should be rotated 180 degrees for uniformity/ consistency	Thank you. We decided to use the images with the cervix at the bottom of the image as they correspond better to schematic drawings.
ISUOG	11	322	I suggest to add: …from cervical and lower transverse Caesarean section scar pregnancies.	Thank you. We have amended the text according to your suggestion.
ISUOG	11	324	I suggest to be very clear in differentiating types of C section scars. Maybe add as follows: "…or after classical Caesarean section (upper/fondus vertical incision)." It is important, because in some countries or in other part of the world the term "classical Caesarean section" is not well known and there can be a misunderstanding with the translation. For example classical can be understand in Spanish as "typical or traditional, most commonly done", and that means lower transverse incision.	Thank you. We have amended the text according to your suggestion.
ISUOG	12	332	Fig. 6b should be rotated 180 degrees for uniformity/ consistency	Thank you. We decided to use the images with the cervix at the bottom of the image as they correspond better to schematic drawings.
Onur Erol	12	333	Please add the term 'scar': sub-classifications of Caesarean scar and cervical pregnancies.	Thank you. This was adjusted.
ISUOG	12	334	Fig. 7b should be rotated 180 degrees for uniformity/ consistency	Thank you. We decided to use the images with the cervix at the bottom of the image as they correspond better to schematic drawings.
Onur Erol	12	335	Caesarean scar ectopic pregnancy instead of Caesarean scar ectopics	Thank you. This was adjusted.
ISUOG	13	342	Agree with intramural	Thank you.
Dr. Nidaa	13	344	"Below or at the level of" should be at or below the level of internal os respectively	Thank you. We have amended the text according to your suggestion.

Roy Farquharson	13	344	Consensus makes sense and should be taken up easily in current practice	Thank you.
Lukasz Polanski and colleagues	13	344	We would like to put to question the description of the location of the caesarean scar pregnancy used. The lower uterine segment is the portion of the uterus above the internal cervical os, hence the description used in your paper 'pregnancies located at or below the level of the internal os' could only be applied to cervical pregnancies and any pregnancy located above the internal cervical os would be intramural pregnancies. Scars originating from 'Lower segment caesarean sections' should therefore be above the internal cervical os'. In practice, these could be anywhere in the vicinity of the internal cervical os (within the cervix or within the lower segment). Often this depends on when the c - section is carried out, with emergency sections likely to be lower. We would therefore ask you to revise the description used. The use of the internal cervical os is misleading and unhelpful. The author has already distinguished that caesarean ectopics and cervical ectopics have different aetiologies from intramural pregnancies. Using the cervical os may also lead to wrong classification as a caesarean scar position is very variable in the lower segment if indeed it is in the lower segment. The caesarean section scar should be the point of differentiation. The internal os is only helpful, in our opinion, in the differentiation of a lower segment intramural pregnancy from an anterior cervical pregnancy.	We agree with your views. We have modified the definition of Caesarean scar pregnancies taking into account your feedback.
2.2 Extrauterine ectopic pregnancies				
Philippe Merviel			Should we talk about tubal ectopic pregnancies located on the fimbria?	Thank you for this comment. We have amended the text to include the fimbrial location of tubal ectopic pregnancy.
Onur Erol	13	350 - 351	tubal ectopic pregnancies can be divided into interstitial, isthmic, ampullary and fimbrial . In clinical practice, the differentiation between isthmic, ampullary and fimbrial ectopic pregnancy is not of major clinical significance	Thank you. This was adjusted.
ISUOG	13	351	CS scar pregnancies do not originate from 'below or at the level of the internal os' – even with a previous term CS scar, this will always be just above the level of the internal os and from the lower part of the uterine corpus. This wording is	Thank you. We have amended the text according to your suggestion.

			misleading and should be changed. It is also inconsistent with the passage on CS scar pregnancies earlier in the guidance.	
Carlos Calhaz-Jorge	13	351 - 352	"Tubal pregnancies located closer to the uterus have a higher potential to grow larger…" Classically ampullary pregnancies reach longer gestational age, so larger size. Probably I'm not following the authors' intention… It would be better to make it clear.	Pregnancies which are located closer to the uterus such as interstitial pregnancies are more likely to develop further and contain live embryo compared to those which are located more distally such as ampullary ectopic pregnancies. For example, nearly 1:3 interstitial pregnancies contain a live embryo compared to 1:20 ectopic pregnancies which are located more distally in the Fallopian tube. In case of Caesarean ectopic pregnancies, live embryos have been reported in 50% of cases.
Alessandra Pipan	22	556	Do the criteria of measurement of ectopic pregnancy proposed fit into the in use criteria for administration of treatment and follow up or do they imply modifications?	Until now there have been no attempts to provide clinicians with an advice regarding the assessment of the size of ectopic pregnancies. The proposed standardised way to measure ectopic pregnancies was designed with the intention to facilitate uniform and more meaningful reporting in clinical trials. Adoption of these standards would make it easier to compare the results of various studies and facilitate clinical audit.
ISUOG	13	356	Agree that interstitial is anatomically type of tubal ectopic pregnancy but it is important to define it, especially if surgical management is indicated. It still carries implications from surgical removal and patients can symptomatically present later	Thank you for this comment.
Alessandra Pipan	13	356 - 357	Interstitial tubal ectopic : described as partially or totally enveloped by myometrium - even if ' later' they develop laterally, is confusing with the 'old' terminology of angular (pag 8) which can sometimes be interstitial partially surrounded by myometrium (??)	There was a clear consensus that 'angular' pregnancy is normally implanted within the uterine cavity and we agreed not to use this term in the future.
Ulrike Metzger	13	Fig 8a	Fallopian tube (instead of Fallopian tune)	Thank you for spotting this error.

Monica Varma	14	366	This may be added- While diagnosing an interstitial ectopic pregnancy, it needs to be differentiated from an eccentrically located gestational sac in the supero lateral angle of the endometrial cavity. There is no intervening myometrium between the endometrium cavity and the gestational sac in the later case. Baltarowich OH. The Term "Cornual Pregnancy" Should Be Abandoned J Ultrasound Med 2017; 36:1081–1087 doi:10.1002/jum.14207	Thank you for this comment. We have adopted the criteria proposed by Ackerman et al. which we believe are better suited for the use in clinical practice.
Onur Erol	14	369	The differentiation between isthmic and ampullary ectopic pregnancy	Thank you. This was adjusted.
ISUOG	14	371	Typo in figure 8a – should be 'tube' in the annotation on the schematic diagram, not 'tune'. Fig. 8b should be rotated 180 degrees for uniformity/ consistency	Thank you. The typo has been corrected.
ISUOG	14	380	Fig. 9b should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
ISUOG	15	381	Fig. 10b and 10c should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
ISUOG	14-15	380-387	Whether it is named interstitial or tubal interstitial, knowing the exact location of the ectopic is essential for surgeons and the procedure they choose to safely perform	Thank you for this comment. We agree.
Grigorios Derdelis	15	388	Consensus might be difficult to localize the ectopic on the fallopian tube. Localization might not be needed or might be misleading clinically.	We agree that in some cases the distinction between the isthmic and ampullary pregnancy could be difficult and therefore we stated that this approach is optional. (line 317)
Ali Sami Gurbuz	15	388	Even making diagnosis of etopic pregnancy is quite difficult through ultrasonography. Classifying interstitial, isthmic or ampullary separately is clinically more difficult. This classification may be considered as pathologically diagnosis. In general, defining them as tubal ectopic pregnancy is sufficient.	The differential diagnosis between interstitial and isthmic pregnancy is critical for the management planning. We agree that the differentiation between isthmic and ampullary tubal ectopic is not so important and we stated that in line 369.
Roy Farquharson	15	388	Subclassification of tubal is welcome	Thank you.
Lukasz Polanski and colleagues	15	388	The classification of a tubal ectopic (interstitial, isthmic, or ampullary) is helpful but again we feel that the author should include that whatever the position, management is also dependent on clinical signs.	Thank you. We agree with your view but again the management of ectopic pregnancy was beyond the scope of our project.

Carlos Calhaz-Jorge	15	393	Does “on palpation” mean “on touch”?. I guess it is ultrasound experts’ jargon. But “palpation” for ordinary gynaecologists probably has another meaning. At least for non-English native speakers	During transvaginal examination the ultrasound probe is routinely used as an extension of examiner's fingers to assess mobility, tenderness and consistency of pelvic structures. We have modified the text to make this clearer.
Onur Erol	15	399 - 401	it is important to utilise colour Doppler in suspected ovarian pregnancies which facilitates detection of corpus luteum and demonstration of another area of increased vascularity within the ovary representing peri-trophoblastic blood flow of an ovarian ectopic. Although this ultrasonographic pattern, also termed as ring of fire, is one of the specific sign of tubal ectopic pregnancy, corpus luteal cyst in the ovary also has a ring of vascularity around it and this pattern may be present.	We agree and therefore we refer to two separate areas of vascularity without describing their features as they may appear similar.
Luca Savelli	15	401	An ovarian pregnancy can be distinguished from a corpus luteum thanks to the different echogenicity of the two structures: an ovarian pregnancy is hyperechoic due to the aspect of the trophoblast, while a corpus luteum has a hypoechoic outer wall (luteal cells)	Thank you. We have amended the text according to your suggestion.
Melinda Mitranovici	15	401	You took into consideration Dopller ultrasound in order to diagnose an ovarian pregnancy Fig 11	Thank you for this comment.
ISUOG	16	410	Fig. 11b and 11c should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
2.3 Rudimentary horn pregnancy				
Ilan Timor	16	419	Please consider adding the aricle HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed/?term=Baltarowich%20OH%5BAuthor%5D&cauthor=true&cauthor_uid=28429456" Baltarowich OH1The Term "Cornual Pregnancy" Should Be Abandoned. HYPERLINK "https://www.ncbi.nlm.nih.gov/pubmed?term=Baltarovich+O+Cornual+pregnancy&otool=nynyumlib&myncbishare=nynyumlib"J Ultrasound Med. 2017 Jun;36(6):1081-1087. doi: 10.1002/jum.14207. Epub 2017 Apr 21. To your reference list and maybe adopt some of its clinically relevant additions to the subject	Thank you. The publication you refer to eloquently describes problems which occur in the absence of consistency and clarity regarding the use of terminology to describe pregnancies in different locations. We agree that there is a strong case for removing the term 'cornual' pregnancy from the classification. We have therefore revised our

				classification and replaced the term 'cornual' pregnancy by 'rudimentary cornu pregnancy'.
Lukasz Polanski and colleagues	16	423	The presence of a uterine anomaly should not detract from describing the latter as a normally sited “ectopic’ pregnancy, however the author should note that a pregnancy in a rudimentary horn can also rupture and have serious consequences. They should also be monitored very closely and managed appropriately.	Thank you for this comment. We agree with your comments and there is a whole paragraph dedicated to pregnancies in the rudimentary uterine cornu (cornual pregnancy) (Line 419).
ISUOG	16	425	Fig. 12b and 12c should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
Lukasz Polanski and colleagues	17	433	We would encourage to use the ESHRE classification of congenital uterine anomalies and not phrases such as ‘Robert’s uterus’.	Thank you, unfortunately the ESHRE classification does not include this type of uterine anomaly.
ISUOG	17	438	Fig. 13b should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
Carlos Calhaz-Jorge	18	443 - 451	Maybe it is a problem of division of text but these paragraphs appear quite abruptly following the thorough description of “Cornual pregnancy” and not clearly linked with it for almost 10 lines. Maybe to reformulate to turn the reading smoother.	Thank you for this comment. We have modified the text to make the message clearer.
ISUOG	18	448 -53	Agree with cornual definition. However, shouldn’t low normally sited pregnancies have additional follow up so that placental abnormalities are identified early for appropriate prompt counselling?	Thank you, but this issue was beyond the scope of our project.
Melinda Mitranovici	18	449	Pregnancies which are located low in the uterine cavity could also be described of placenta acretta not only placenta praevia especially when it is located on cesarean	Thank you for this comment.
ISUOG	18	449	Fig. 14b should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
ISUOG	18	452 - 465	As mentioned previously, the confusion likely arises as the term ‘uterine’ cavity is too vague – changing this to ‘endometrial ‘ cavity is clearer, allowing the distinction between what is always normal (exclusive endometrial implantation) versus that which is not (myometrial involvement)	Thank you. We have discussed your suggestion at length. The WG agreed to retain the term uterine cavity as most documents describing the uterine morphology tend to use it. However, we indicated in the text that 'endometrial cavity' could be used as an alternative.

Onur Erol	18	456	Please use the term ectopic pregnancy (instead of ectopics)	Thank you. This was adjusted.
Lukasz Polanski and colleagues	18	456	Typographical error- reads 'as longs' and should be 'as long'.	Thank you. This was adjusted.
Roy Farquharson	18	457	Being consistent in terminology approach is welcome. The 'what if' is always a challenge to describe every scenario	Thank you.
Wen Jui Yang	18	458	If the term angular pregnancy should be abandoned (page 9, line255), the describe of embryo implantation to utero-tubal junction in normal shape uterus should use the term " cornual pregnancy", not just limit to the pregnancy which is located in a rudimentary horn of unicornuate uterus. Because of the pregnancy located to the site of utero-tubal junction still has the risk to cause uterine rupture (Nash C, et. al, 2019; Whynott RM, et.al,2019; Xu W, et.al, 2018)	The committee did review the evidence and it was unanimous in deciding that laterally implanted pregnancies are not associated with an increased risk of adverse outcomes and that the term 'angular' pregnancy should be abandoned.
Lukasz Polanski and colleagues	18	458	The definition for cornual ectopic is clear and precise and should be adopted.	Thank you.
2.4 Residual ectopic pregnancy				
Mridu Sinha	18	460	In case of Residual ectopic pregnancy if Beta HCG is negative then how will you confirm the diagnosis ?	The diagnosis should be based on ultrasound findings. We have expanded this section to provide more information regarding ultrasound appearances of residual ectopic pregnancies.
Mohamed Shahin	18	460	It is an interesting and useful update to use the term "residual ectopic" but what about the other situation when a slowly or persisting mass/haematoma identified after weeks of persisting pain/pregnancy, which sometimes described as "chronically disturbed ectopic pregnancy" mostly when there is a haematoma (stable) with clots in the pouch of Douglas. Did the panel/Working group have an opinion on that situation and nomenclature.	Thank you for this comment. The situation that you describe would be classified as residual ectopic under this proposal.
ISUOG	18	460	Agree with residual ectopic pregnancy and the hCG values and length of time – what about negative UPT, >3 months and high vascularity?	Vascularity would not affect the classification of ectopic as being residual.

Jiuzhi Zeng	18	476 - 479	First sentence : The term is to be used to describe an ectopic pregnancy which presents as a discrete mass on ultrasound in women with a negative pregnancy test" (line 470-472) Second sentence: In view of that the term residual ectopic pregnancy could also be used when conservatively managed ectopic pregnancy remains visible on ultrasound scan longer than three months after urine pregnancy test turns negative or after serum hCG declines to < 20 IU/l. (line 476-479) I think there is no time limit when we use the term "Residual ectopic pregnancy" from the first sentence. Then the means in the second sentence should be included in the first sentence.	The text refers to two different clinical presentations. The first scenario describes a situation where the diagnosis is made in a woman who was unaware of being pregnant with an ectopic pregnancy. The second scenario is a patient with a known conservatively managed ectopic pregnancy who is attending for a follow up scan which demonstrates continuing presence of ectopic pregnancy more than three months after her pregnancy test turned negative.
ISUOG	19	Fig 15	What about ectopic pregnancies with gestation sac and negative hCG	They could be classified as residual if they persist for longer than three months following a negative pregnancy test.
Melinda Mitranovici	19	483	And also you used Dopller ultrasound to identify a residual ectopic pregnancy Fig 16	Thank you for this comment. You are correct.
Ali Sami Gurbuz	19	485	I believe saying remnant ectopic pregnancy, instead of residual ectopic pregnancy is more proper.	Thank you for this comment. However, there was a clear consensus among the participants which favoured the term 'residual'.
Philippe Merviel	19	485	consensus: I think the residual term should be used if a mass persists with negative hCG beyond 3 months.	Thank you for this comment. We agree.
Roy Farquharson	19	486	Welcome change of terminoogy	Thank you.
ISUOG	19	488	It may be worth mentioning here, for clarification, that there must be a clear prior diagnosis of an ectopic pregnancy before a solid avascular adnexal mass is termed a residual ectopic pregnancy in a woman with a mass such as this and a negative pregnancy test (to rule out misdiagnosis of another cause of visualizing a mass such as this, e.g. broad ligament fibroid).	We do not agree with this suggestion. Residual ectopic pregnancy could be diagnosed on ultrasound scan even without the diagnosis being previously made. We agree that subserous fibroids should be considered in the differential diagnosis, but this discussion was beyond the scope of our project.
3. Qualitative and quantitative descriptions of ectopic pregnancy				

ISUOG	20	491	Fig. 16a and 16b should be rotated 180 degrees for uniformity/ consistency	We feel that these figures are more informative in the current format.
ISUOG	20	498	You take 3xplane measurements for trophoblast, GS and haematosalpinx and create the mean for each. Do you then choose the largest number? Do you take the means of all 3 means? What number do you use to dictate management? Not clear in document	We feel that all measurements are important as they convey different information. In principle the size of the largest structure has most relevance regarding the management planning.
Lukasz Polanski and colleagues	20-22	510 and 548	Figure 17 is very helpful and will help standardize measurements and generating reports. Figure 18 again is very helpful in standardizing practice.	Thank you for this comment.
Lukasz Polanski and colleagues	21	519 - 522	It may be worth mentioning that in the presence of OHSS, there may be a diagnostic difficulty in assessing the amount of bleeding due to the dilutional effect of the fluid present already within the peritoneal cavity.	Thank you for this comment. We have amended the text according to your suggestion.
Philippe Merviel	21	520	Douglas' pouch effusion should be measured because it can be used in the scalability of intra-abdominal bleeding (not just a semi-quantitative assessment should be made). The same is true for the Morisson (inter-hepato-renal space)	Thank you for this comment. However, there is no evidence to show that these measurements are accurate and helpful with clinical management.
ISUOG	21	520	Semi-quantitative classification is helpful but, just like measurements, gives no indication of the rate of blood loss the patient is experiencing and should be used with caution.	We agree, but this is the best method to assess the amount of intraperitoneal bleeding available at present.
Melinda Mitranovici	21	528	But you do not use the Doppler ultrasound for a differential diagnosis between an intramural pregnancy and an adenomyosis for example,or an pseudigestational sac and a normal pregnancy	Thank you. We have amended the text to include a reference to Doppler examination in differential diagnosis of intramural pregnancies.
ISUOG	22	530	It may be useful to have a figure/ schematic explaining the proposed classification of a haemoperitoneum	Thank you. We have added a figure showing degrees of haemoperitoneum.
Lukasz Polanski and colleagues	21	532	We agree that the measurements of the ectopic pregnancy be carried out in the manner described in the paper as part of routine assessment. Appropriate semi-quantitative description of haemoperitoneum should supplement the report.	Thank you for this comment.
Discussion				

Carlos Calhaz-Jorge	21	537	I guess the "," before (Fig 18) is not needed	Thank you. This was adjusted.
Lorenzo Abad de Velasco	21	537	…ectopic pregnancies, (Fig.18). should be without the coma: "ectopic pregnancies" (Fig.18). "	Thank you. This was adjusted.
Carlos Calhaz-Jorge	21	540	I guess "by" is missing in "caused by a rapid increase…".	Thank you. This was adjusted.
Lukasz Polanski and colleagues	21	541 - 545	We suggest the statement in lines 541- 545 be rephrased as the nomenclature will only allow for standardization and will not help the clinicians with the challenges related to the location of the pregnancies. It is the wrong diagnosis, not name, that will lead to medico-legal implications (line 545). Caution should be exercised when writing about opinions on medico-legal ramifications . These are worst when clinical signs are ignored and there is misdiagnosis. Misidentification is not as crucial if the former have not occurred.	We agree with most of your comments. However, until now there has been no clear definition what constitutes a normally-sited intracavitary pregnancy. That has been causing difficulties in clinical practice, sometimes leading to errors in discriminating between eutopic and uterine ectopic pregnancies. We believe that the proposed classification will help to prevent similar problems occurring in the future and reduce both clinical and medico-legal risks.
Melinda Mitranovici	21	545	In order to avoid a wrong diagnosisand the adverse outcomes I find it could be usefull to find a place for Doppler ultrasound for all types ectopic pregnancies.	We agree and we have modified the manuscript accordingly.
ISUOG	22	Fig 18	In Fig 18 Insterstitial tubal ectopic pregnancies should be labelled as complete or incomplete as well (see text)	We agree and we have modified the figure accordingly.
Onur Erol	22	549 - 567	Ectopic means ' an abnormal place or position' that may be an organ not in its proper position (e.g. ectopic kidney, ectopic pregnancy, ectopic ovary)	Thank you for this comment.
Lukasz Polanski and colleagues	22	571	We agree with the proposal of identification of centers of expertise for early pregnancy imaging with an easy access using digital methods and facilitated transfer of still images as well as cine-loops/ videos. We do question however, how these centers will be identified and what measures will be taken place to 1. Accredit such units and 2. Audit such units in their practice and outcomes. Which organization will take on the responsibility of setting up and monitoring such a network on a national and or international scale?	Thank you for these very thoughtful and pertinent comments. In the UK we have taken first steps to initiate this process through the UK Association of Early Pregnancy Units. ESHRE Early Pregnancy Clinical Study Group will explore whether similar process could be started at the European level.

Supplementary data				
ISUOG	26	694 - 695	Difficult to ask such questions when the question includes one of the answers	Agree - this is a fair comment, but it cannot be rectified.
ISUOG	27	712 - 713	Difficult to ask such questions when 'viable' is not in the answers, but present as an answer in the previous question. 'Ongoing' is in these answers but not in the previous answer options.	Thank you. We did not include the option viable pregnancy as, according to the definition of viability, this term should not be used to describe pregnancies before completed 24 weeks' gestation.