Form 1: Eligbility Screening

Record ID _____

Eligbility Screening

Age in years

_____
(In completed years at time of laparoscopy)

Is the patient undergoing a laparoscopic, laparoscopic assisted or robotic procedure where it is possible to visualise the lower anterior abdominal wall and pelvis?

This can be for any indication i.e. diagnostic laparoscopy, laparoscopic cholecystectomy

◯ Yes
◯ No

Has the patient undergone extensive abdominal wall repair or LATI-H hernia repair prior to laparoscopy?

◯ Yes
◯ No

This patient is not eligble for the LATITUDE 1 Study
Please review the study protocol

The following patients should be included:
● Adults aged 18 years and over;

● Undergoing a laparoscopic, laparoscopic assisted or robotic procedure where it is possible to visualise the lower anterior abdominal wall and pelvis;

● Procedure performed in the presence of a consultant, trainee, allied health professional or medical student who has completed the online LATITUDE 1 outcome assessment module.

The following patients should not be included:

● All open procedures or where a laparoscopic approach was intended but pneumoperitoneum could not be established to examine the anterior abdominal wall;

● Patients already included in the study or returning to theatre - each individual patient should only be included in the study once

● Patients who have already undergone extensive abdominal wall repair or LATI-H hernia repair prior to laparoscopy.

This patient is eligble for the LATITUDE 1 Study
Please select 'Complete' in the drop-own below, then click 'Save & go to next form'

Form 2: Patient Characteristics

Patient Demographics

Sex at birth	◯ Male ◯ Female (Birth sex (Female / Male))
Height (cm)	_____ (Measured in centimetres (cm); within 1 year of index procedure)
Weight (Kg)	_____ (Measured in kilograms (Kg); within 3 months of index procedure)
Smoking status	◯ Current ◯ Previous (stopped smoking < 6 weeks) ◯ Previous (stopped smoking 6 weeks - 1 year) ◯ Previous (stopped smoking >1 year) ◯ Never smoked

Gynaecological / Obstetric History

Does the patient menstruate?	◯ Yes ◯ No - Post-menopausal ◯ No - Perimenopausal ◯ No - Hysterectomy ◯ No - On contraceptive pill / injection or device ◯ No - Hormone or endocrine for amenorrhoea
Has the patient ever had a diagnosis of pelvic inflammatory disease?	◯ Yes - Treated ◯ Yes - Not treated ◯ No - Neither
Has the patient ever had a diagnosis of endometriosis?	◯ Yes ◯ No
Previous pregnancy	◯ Yes - not currently pregnant ◯ Yes - currently pregnant ◯ No - never
Gravidity carried to ≥ 26 weeks	_____ (Number of pregnancies (whole integer))
Parity to ≥ 38 weeks	_____ (Number of children born (whole integer))
Were all previous pregnancies singleton?	◯ Yes ◯ No - twins ◯ No - triplets ◯ No - other

Please Specify 'Other'

_____

Number of previous caesarean sections

_____
(Number of caesarean sections (whole integer))

Were any of the caesarean sections done as an emergency?

◯ Yes
◯ No

Dates of caesarean section 1

_____
(in the form of MM/YYYY)

Dates of caesarean section 2

_____
(in the form of MM/YYYY)

Dates of caesarean section 3

_____
(in the form of MM/YYYY)

Dates of caesarean section 4

_____
(in the form of MM/YYYY)

Dates of caesarean section 5

_____
(in the form of MM/YYYY)

Dates of caesarean section 6

_____
(in the form of MM/YYYY)

Dates of caesarean section 7

_____
(in the form of MM/YYYY)

Patient Characteristics and Past Medical History

Performance Status

◯ Asymptomatic, completely independent and ambulatory
◯ Symptomatic but completely independent and ambulatory
◯ Symptomatic, in bed < 50% of the day
◯ Symptomatic, in bed >50% of the day but not bedbound
◯ Bedbound

Current occupation classification	◯ Not currently employed or in study ◯ Managers, directors and senior officials ◯ Professional occupations ◯ Associate professional occupations ◯ Administrative and secretarial occupations ◯ Skilled trades occupations ◯ Caring, leisure and other service occupations ◯ Sales and customer service occupations ◯ Process, plant and machine operatives ◯ General labour (i.e. security, factory, construction, groundwork, other physical trades) ◯ Full-time study ◯ Part-time study ◯ Other
Previous abdominal or pelvic surgery	◯ Yes - any open abdominal or pelvic procedure ◯ Yes - Laparoscopic or robotic surgery only ◯ No
Long-term health conditions	☐ None ☐ Previous myocardial infarction ☐ Ischaemic heart disease ☐ Peripheral vascular disease ☐ Congestive cardiac failure (NYHA I / II / III / IV) ☐ Cerebrovascular disease ☐ Dementia ☐ Previous TIA / stroke ☐ COPD ☐ Peptic ulcer disease ☐ HIV/AIDS ☐ Diabetes Mellitus ☐ Mild liver disease ☐ Moderate / severe liver disease (cirrhosis) ☐ Cancer without metastases ☐ Lymphoma / leukaemia ☐ Rheumatologic disease ☐ Inflammatory Bowel Disease ☐ Metastatic cancer ☐ Chronic Kidney Disease ☐ Venous thromboembolism ☐ Connective tissue disorder ☐ Fibromyalgia ☐ Chronic pain syndrome (Tick all which apply or select 'none')
Does the patient take any anti-platelet medication or anti-coagulants?	◯ Yes ◯ No
Select antiplatelet / anticoagulant medication	☐ Aspirin ☐ Clopidogrel ☐ Ticagrelor ☐ Prasugrel ☐ Dipyridamole ☐ Ticlopidine ☐ Warfarin ☐ Rivaroxaban ☐ Dabigatran ☐ Apixaban ☐ Edoxaban ☐ Argatroban ☐ Abciximab ☐ Tirofiban

If the patient has cardiac failure, what is the NYHA classification?	◯ Class I ◯ Class II ◯ Class III ◯ Class IV
Stage of chronic kidney disease	◯ Stage I ◯ Stage II ◯ Stage IIIA ◯ Stage IIIB ◯ Stage IV ◯ Stage V
History of diabetes mellitus	◯ Type I ◯ Type II - diet controlled ◯ Type II - tablet controlled ◯ Type II - insulin controlled
Immunosuppressive drugs (non-cancer)	◯ No ◯ Yes - oral steroids ◯ Yes - oral DMARDs (Azathioprine, methotrexate) ◯ Yes - biologics
Active cancer and/or cancer treatment	◯ No ◯ Yes - curative intent ◯ Yes - palliative intent ◯ Yes - end of life

Form 3: Abdominal / Pelvic Pain Symptoms

Symptoms

Does the patient have any of the following symptoms, or other symptoms that may be from a pelvic cause or lower abdominal interparietal hernia, or other abdominal wall hernia?

This may include:

Pelvic pain
Pain worse on exercise or lifting
Stabbing pain
Heavy periods
Bleeding between periods
Urinary frequency
Urinary Urgency
Pain or difficulty with bowel movements
Pain while urinating
Lower abdominal pain
Lower back pain
Deep dyspareunia Bulge / lump in the lower abdomen
Pressure / heaviness
Nausea / vomiting
Bowel obstruction symptoms (vomiting, abdominal distention, not opening bowels for 24 hours or longer)
Cosmetic concerns around the lower abdomen
Bloating
Diarrhoea / faecal urgency
Difficulty conceiving (requiring fertility treatments)
Other

_____

Does the patient have any of the following symptoms?

- ☐ None
- ☐ Pelvic pain
- ☐ Pain worse on exercise or lifting
- ☐ Stabbing pain
- ☐ Heavy periods
- ☐ Bleeding between periods
- ☐ Urinary frequency
- ☐ Urinary Urgency
- ☐ Pain or difficulty with bowel movements
- ☐ Pain while urinating
- ☐ Lower abdominal pain
- ☐ Lower back pain
- ☐ Bulge / lump in the lower abdomen
- ☐ Pressure / heaviness
- ☐ Nausea / vomiting
- ☐ Bowel obstruction symptoms (vomiting, abdominal distention, not opening bowels for 24 hours or longer)
- ☐ Cosmetic concerns around the lower abdomen
- ☐ Bloating
- ☐ Diarrhoea / faecal urgency
- ☐ Difficulty conceiving (requiring fertility treatments)
- ☐ Deep dyspareunia
- ☐ Other (free text)

Other symptoms

_____

Are the symptoms cyclical in nature?

◯ Yes
◯ No

When did the first symptoms start?

_____
(Can be approximate month)

When did the pelvic pain Start?

_____
(Can be approximate month)

When did the stabbing / back / lumbar pain start?

_____
(Can be approximate month)

Investigations

Has the patient been referred or assessed for these symptoms?

◯ Yes - has been seen in clinic by a pelvic pain specialist (gynaecologist or chronic pain service)
◯ Yes - awaiting appointment
◯ Yes - but referral declined
◯ No - never referred

Has a cause for these symptoms been identified?

☐ Normal scan - no cause for symptoms identified
☐ Endometriosis
☐ Pelvic Inflammatory Disease
☐ Rectal Prolapse
☐ Vaginal or Uterine prolapse
☐ Adenomyosis
☐ Ovarian cyst
☐ Lower Transverse Incisional / Interparietal Hernia
☐ Incisional Hernia
☐ Inguinal Hernia
☐ Femoral Hernia
☐ Other Abdominal Wall Hernia
☐ Colorectal Cancer
☐ Free fluid
☐ Other finding

Has the patient received imaging studies or a diagnostic laparoscopy for these symptoms?

☐ None
☐ Ultrasound scan
☐ Magnetic Resonance Scan
☐ Computed Tomography Scan
☐ Diagnostic or Therapeutic Laparoscopy

Investigation findings

- ☐ Normal scan - no cause for symptoms identified
- ☐ Endometriosis
- ☐ Pelvic Inflammatory Disease
- ☐ Rectal Prolapse
- ☐ Vaginal or Uterine prolapse
- ☐ Adenomyosis
- ☐ Ovarian cyst
- ☐ Lower Transverse Incisional / Interparietal Hernia
- ☐ Incisional Hernia
- ☐ Inguinal Hernia
- ☐ Femoral Hernia
- ☐ Other Abdominal Wall Hernia
- ☐ Colorectal Cancer
- ☐ Free fluid
- ☐ Other finding

Describe other finding on imaging

_____

Could any of these symptoms be attributable to an incisional hernia?

- ◯ Yes
- ◯ No

Impact on life

Does the patient take regular (long-term) analgesia for these symptoms?

- ☐ None
- ☐ Paracetamol
- ☐ Ibuprofen
- ☐ Other non-selective COX / NSAID (i.e. Diclofenac, Naproxen etc.)
- ☐ COX-2 inhibitor NSAID
- ☐ Codeine / Dihydrocodeine
- ☐ Tramadol
- ☐ Tapentadol
- ☐ Hydromorphone
- ☐ Morphine / Diamorphine
- ☐ Oxycodone
- ☐ Fentanyl
- ☐ Nefopam
- ☐ Amitriptyline
- ☐ Nortriptyline
- ☐ Fluoxetine
- ☐ Duloxetine
- ☐ Pregabalin
- ☐ Gabapentin
- ☐ Buprenorphine
- ☐ Methadone
- ☐ Carbamazepine
- ☐ Other analgesic (please specify)

(Long-term that are prescribed and taken in community. NOT acute medicines.)

Specify other analgesia

_____

Has the patient lost/left or had to change occupation due to these symptoms?

- ◯ No - never
- ◯ Yes - changed occupation (including education)
- ◯ Yes - left employment or occupation (including education)

Has the patient had to stop or alter caring responsibilities / duties due to these symptoms?	◯ No - never ◯ Yes - changed responsibilities ◯ Yes - stopped responsibilities

WHODAS-12 - In the past 30 days

	None	Mild	Moderate	Severe	Extreme (or cannot do)
Do these symptoms have an effect on standing for long periods such as 30 minutes?	◯	◯	◯	◯	◯
Do these symptoms have an effect on taking care of his or her household responsibilities?	◯	◯	◯	◯	◯
Do these symptoms have an effect on Learning a new task?	◯	◯	◯	◯	◯
Do these symptoms have an effect on joining in community activities?	◯	◯	◯	◯	◯
Have these symptoms emotionally affected the patient?	◯	◯	◯	◯	◯
Do these symptoms have an effect on concentrating on doing something for ten minutes?	◯	◯	◯	◯	◯
Do these symptoms have an effect on walking a long distance such as a kilometre	◯	◯	◯	◯	◯
Do these symptoms have an effect on washing his or her whole body?	◯	◯	◯	◯	◯
Do these symptoms have an effect on getting dressed?	◯	◯	◯	◯	◯
Do these symptoms have an effect on dealing with people he or she does not know?	◯	◯	◯	◯	◯
Do these symptoms have an effect on maintaining a friendship	◯	◯	◯	◯	◯
Do these symptoms have an effect on his or her day-to-day work?	◯	◯	◯	◯	◯

Form 3S: Surgical History

Surgical History

Number of previous abdominal or pelvic operations (include C-sections)

_____

You have previously indicated that the patient has undergone abdominal or pelvic surgery - please check your entries

Have any of these procedures been open or converted to open from laparoscopic / robotic, or required an extraction port?

- ◯ Yes
- ◯ No

Previous operation details

- ☐ C-section
- ☐ Hysterectomy
- ☐ Appendicectomy
- ☐ Hernia repair
- ☐ Cholecystectomy
- ☐ Colorectal resection
- ☐ Bariatric surgery
- ☐ Liver resection
- ☐ Pancreatic resection
- ☐ Oophorectomy-salpingo-oophorectomy
- ☐ Laparotomy (other)
- ☐ Laparoscopy (other)
- ☐ Other (free-text)

Previous operation details - 'Other'

_____

Date of the last operation

_____

Incision characteristics

Incision types for previous open procedures

- ☐ Midline
- ☐ Paramedian
- ☐ Gridiron
- ☐ Kocher
- ☐ McBurney
- ☐ Lanz
- ☐ Chevron/Rooftop
- ☐ Mercedes-Benz
- ☐ Transverse (Abdominal)
- ☐ Rutherford Morison
- ☐ Pfannenstiel (Pelvic/C-Section)
- ☐ Joel-Cohen (Pelvic/C-Section)
- ☐ Other (specify)

Other incision for open procedure - please specify type of incision and location

_____

Incision types for previous caesarean sections	☐ Pfannenstiel ☐ Joel-Cohen ☐ Transverse (other) ☐ Midline ☐ Oblique ☐ Other
Specify other type of c-section incision	_____
Closure details for previous caesarean sections or lower transverse incision	☐ Closure of anterior fascia but posterior fascia layer (transversalis or peritoneum) not closed ☐ Closure of anterior fascia and closure of posterior fascia layer (transversalis or peritoneum) ☐ Bulk closure of anterior fascia but posterior fascia layer (transversalis or peritoneum) ☐ Not documented ☐ Other (free-text)
Closure details for previous caesarean sections or lower transverse incision - 'Other'	_____

Form 4: Intraoperative Details And Laparoscopy Findings

ASA Grade

- ◯ ASA I: A normal, healthy, non-smoking patient with no or minimal alcohol use
- ◯ ASA II: A patient with mild systemic disease, such as controlled hypertension or social smoking or obesity (BMI > 30)
- ◯ ASA III: A patient with severe systemic disease that is not immediately life-threatening, such as poorly controlled diabetes or severe obesity (BMI > 40)
- ◯ ASA IV: A patient with severe, life-threatening systemic disease, like a recent heart attack or stroke (< 3 months)
- ◯ ASA V: A moribund patient not expected to survive without the operation, such as severe trauma or ruptured aneurysms

Operation Details

Operative approach

- ◯ Laparoscopic / Robotic
- ◯ Laparoscopic / Robotic assisted (pneumoperitoneum established)
- ◯ Laparoscopic / Robotic converted to open (pneumoperitoneum established)
- ◯ Laparoscopic / Robotic converted to open (pneumoperitoneum could not be established)
- ◯ Open

This patient is not eligible for inclusion in LATITUDE-1
For LATITUDE-1, pneumoperitoneum and laparoscopy must be possible. Open procedures are not included.

Operative Urgency

- ◯ Elective (planned): Procedures booked in advance. Timing is scheduled to suit the patient, hospital, and staff.
- ◯ Expedited (within days): Early treatment required but there is no immediate threat to life, limb, or organ.
- ◯ Emergency - Urgent (within hours): Acute onset or clinical deterioration where conditions threaten survival, severe pain, or involve fracture fixation.
- ◯ Emergency - Immediate (within minutes): Life, limb, or organ-saving interventions. Surgery is often concurrent with resuscitation.

Indication for laparoscopy / laparoscopic surgery

_____
(ICD-10 Diagnosis Search)

Knife to skin time

_____

Time of end of operation

_____

Intraoperative findings

Intraoperative findings on laparoscopy/ laparoscopic surgery

- ☐ None - normal laparoscopy
- ☐ Abdominal Wall Hernia / lower third abdominal wall adhesions identified (LATI-H or other hernia type)
- ☐ Other non-hernia pathology

Other finding at laparoscopy / laparoscopic surgery

_____

Hernia type

- ☐ Lower Transverse Incisional / Interparietal (LATI-H)
- ☐ Incisional ventral
- ☐ Umbilical
- ☐ Paraumbilical
- ☐ Other incisional
- ☐ Port-site hernia
- ☐ Inguinal

Longitudinal Abdominal Transverse Interparietal / Incisional Hernia (LATI-H) Characteristics

Zanellato's Classification of LATI-H

What Zanellato Grade LATIH was found at operation?

_____

Approximate abdominal wall defect size - Height (cm)

_____
(Inferior - Superior direction (vertical/craniocaudal))

Approximate abdominal wall defect size - Width (cm)

_____
(Medial - Lateral direction (longitudinal))

Number of defects

_____

Hernia contents

- ☐ Empty Sac
- ☐ Adhesions
- ☐ Omentum
- ☐ Mesentery
- ☐ Small bowel
- ☐ Large bowel
- ☐ Uterus
- ☐ Fallopian tube
- ☐ Ovary
- ☐ Bladder
- ☐ Other (free-text)

Other hernia contents

_____

Adhesions present	◯ No ◯ Yes - film ◯ Yes - dense

LATI-H intervention

Did the hernia / adhesions require any intervention, mobilisation or taking down from abdominal wall?	◯ No ◯ Yes - blunt dissection ◯ Yes - diathermy / sharp dissection
Was any abdominal wall repair or other reduction performed?	◯ No ◯ Yes- Reduction only ◯ Yes - Suture repair ◯ Yes - Component separation
Was a mesh repair used?	◯ No ◯ Yes, with Synthetic - non-absorbable mesh ◯ Yes, with Synthetic - absorbable mesh ◯ Yes, with Biological mesh ◯ Yes, with Hybrid mesh
Mesh placement	◯ On-lay ◯ Inlay ◯ Interposition ◯ Retrorectus ◯ Preperitoneal ◯ Intraperitoneal

Form 5: 30-Day Outcomes

30-day outcomes

Day 0 is defined as the day of the operation

Mortality within 30-days?

- ◯ No
- ◯ Yes - in-hospital
- ◯ Yes - out of hospital

Date of in-hospital death OR discharge

_____

Date of out of hospital death

_____

Any postoperative complications within 30-days?

Any complication from any cause should be included, including death from other causes

- ◯ Yes
- ◯ No

(Day 0 is the day of operation)

Reintervention within 30-days?

- ☐ No
- ☐ Yes - Radiological
- ☐ Yes - Endoscopic
- ☐ Yes - Return to theatre

Discharge Destination

- ◯ Discharge to a domestic home or usual place of residence with no new or additional health or social care needs
- ◯ Discharge home (or a temporary place) with new or additional health and/or social care support to aid recovery
- ◯ Discharge to a short-term community bed-based setting (such as a community hospital, rehabilitation unit, or hospice) with dedicated recovery support
- ◯ Discharge to a new care home or nursing facility for people likely to need long-term 24-hour care. This is only used in exceptional circumstances following an assessment

Hernia Surgery Specific Complications

Select the maximal severity of all complications related to this procedure

- ◯ Grade I - Any deviation from normal postoperative course without pharmacological treatment or surgical, endoscopic, or radiological interventions
- ◯ Grade II - Complication requiring pharmacological treatment (e.g. antibiotics, blood transfusion, TPN)
- ◯ Grade IIIa - Complication requiring surgical, endoscopic or radiological intervention without general anesthesia
- ◯ Grade IIIb - Complication requiring surgical, endoscopic or radiological intervention under general anesthesia
- ◯ Grade IVa - Life-threatening complication requiring ICU management (single organ dysfunction)
- ◯ Grade IVb - Life-threatening complication requiring ICU management (multi-organ dysfunction)
- ◯ Grade V - Death

Clavien-Dindo Classification of Postoperative Complication Severity
No complication Routine post-operative course
Grade I Any deviation from the routine post-operative course
Grade II Complication requiring pharmacological treatment only (i.e. antibiotics, blood transfusion, TPN)
Grade IIIa Complication requiring surgical, endoscopic or radiological reintervention under local / regional anaesthesia
Grade IIIb Complication requiring surgical, endoscopic or radiological reintervention under general anaesthesia
Grade IVa Complication requiring ICU support for single organ failure / or single-organ failure but not appropriate for ICU level care
Grade IVb Complication requiring ICU support for multi-organ failure / or multi-organ failure but not appropriate for ICU level care
Grade V Death

30-day Hernia Specific Complications

	None	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Death
Seroma	◯	◯	◯	◯	◯	◯	◯	◯
Surgical Site Infection (SSI)	◯	◯	◯	◯	◯	◯	◯	◯
Wound Dehiscence	◯	◯	◯	◯	◯	◯	◯	◯
Repair Dehiscence	◯	◯	◯	◯	◯	◯	◯	◯
Haematoma / Bleeding	◯	◯	◯	◯	◯	◯	◯	◯
Urinary Retention	◯	◯	◯	◯	◯	◯	◯	◯
Bowel Injury	◯	◯	◯	◯	◯	◯	◯	◯
Bladder Injury	◯	◯	◯	◯	◯	◯	◯	◯
Pain	◯	◯	◯	◯	◯	◯	◯	◯
Mesh Infection	◯	◯	◯	◯	◯	◯	◯	◯
Mesh Explant	◯	◯	◯	◯	◯	◯	◯	◯
Enteric/Enterocutaneous Fistula	◯	◯	◯	◯	◯	◯	◯	◯
Mesh Migration	◯	◯	◯	◯	◯	◯	◯	◯
Bowel Obstruction	◯	◯	◯	◯	◯	◯	◯	◯