Title:	**Management of UKAS Flexible Scope for Immunohistochemistry – Bond III and Ventana Ultra Platforms**
Subject:	**Quality Management - Accreditation**

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1. Introduction

1.1 Scope and Principle

The Advanced Diagnostics (AD) laboratory (Cellular Pathology, Tissue Sciences, GSTT) has two automated immunohistochemistry (IHC)/in situ hybridisation (ISH) platforms – Leica Bond III; Roche Ventana Ultra, and the Head and Neck Pathology (H&N) Laboratory has the Roche Ventana Ultra only. These platforms are used to provide the majority of diagnostic immunohistochemistry and in-situ hybridisation tests requested by the Cellular Pathology and Head and Neck Pathology Consultant Pathologists; in addition, the laboratories provide these tests to external, third-party customers on request.

The AD and H&N laboratory is continually developing new tests on the above-named platforms, in line with diagnostic requirements, and according to the Synnovis New Test process. The number of new tests being developed and added to the laboratory's repertoire makes it impractical to seek a UKAS Extension to Scope each time, in order to get a new test added to the schedule of accreditation. Therefore, a flexible scope will be used for these platforms, to allow new tests to be included within the laboratory's accredited scope, prior to an assessment visit, and without the need for them to be individually listed on the schedule of accreditation.

The process for introducing a new test under the flexible scope must be controlled and there must be documented processes within the laboratory QMS to allow for a full audit trail to be recreated. Only those activities and locations listed under the flexible scope will be covered by the flexible scope accreditation.

1.2 Limitations to the Flexible Scope

This process only applies to tests (immunohistochemistry and in-situ hybridisation) carried out on formalin-fixed, paraffin embedded tissue, using the methods stated in Section 2, on the Leica Bond III and Roche Ventana Ultra platforms located in the Advanced Diagnostics laboratory, 2nd Floor North Wing, St Thomas's Hospital, and the Head and Neck Laboratory, 4th Floor Tower Wing, Guy's Hospital - not to any other type of activity or location.

2. Activities covered by Flexible Scope

Only IHC and ISH tests performed on the Leica Bond III and Roche Ventana Ultra platforms, involving the specimen types and methods listed below are covered by the flexible scope. A list of these tests is maintained on CPH-INST-395 and HN-INST-138.

Specimen types included in the flexible scope: Formalin fixed; paraffin embedded (FFPE) tissue

Methods included in the flexible scope:

St Thomas's Advanced Diagnostics Laboratory -

Ventana Benchmark:

- Antigen retrieval methods:
  - Ultra Cell Conditioning Solution 1 (CC1)
  - Ultra Cell Conditioning Solution 2 (CC2)
  - Protease 1
- Detection Kits:
  - UltraView DAB
  - Optiview DAB
  - Ultraview Amplification Kit
  - Optiview DAB Amplification Kit

Bond III:

- Antigen retrieval methods:
  - Bond Epitope Retrieval 1 (ER1)
  - Bond Epitope Retrieval 2 (ER2)
  - Bond Enzyme Pretreatment
- Detection kits:
  - Bond Polymer Refine
  - ChromoPlex 1 Dual Detection

Head and Neck Pathology Laboratory -

Ventana Benchmark:

- Antigen retrieval methods:
  - Ultra Cell Conditioning Solution 1 (CC1)
  - Ultra Cell Conditioning Solution 2 (CC2)
  - Protease 1
  - Protease 3
- Detection Kits:
  - UltraView DAB
  - Optiview DAB
  - Ultraview Amplification Kit
  - Optiview DAB Amplification Kit
  - iView Blue Kit
  - iView Blue Plus Kit

If alternate platforms, specimen types and/or methods are introduced, these, and any tests performed on or with them, must go through the UKAS extension to scope procedure (see GSTT-TS-SOP-17). Likewise, manual IHC and ISH tests are not included in the flexible scope, and therefore any new manual tests must also go through the UKAS extension to scope procedure.

CPH-INST-395 is referenced in the Cellular Pathology User Guide (CP-USER-6), HN-INST-138 is referenced in the Head and Neck User Guides (HN-USER-1 and HN-USER-2) and is located on the Synnovis website for users to access.

3. Flexible Scope Management

3.1 Notification of new test

A diagnostic requirement for a new IHC or ISH test maybe established by the GSTT Consultant Pathologists (within their specialty reporting teams) or raised to the laboratory/Synnovis by our users if a particular test is required to support patient treatment (specifically in the case of companion diagnostic tests). This requirement will be communicated to the AD Operations Manager who will take this request forward through the Synnovis New Test process (see GSTT-TS-SOP-17).

Once agreement has been given for the implementation of the new test, the AD Operations Manager will inform the Tissue Sciences Quality Manager of the details of the test, and what platform it will be performed on.

The Quality Manager will add the test details to CPH-REC-221 AD New Tests spreadsheet, or HN-REC-146 H&N New Tests spreadsheet. These spreadsheets are then updated as the following steps are carried out.

3.2 Verification/validation of a new test

Once a new test has been approved (see Section 3.1), it must be verified/validated according to the procedure in GSTT-TS-SOP-1 Selection, Verification and Validation of Examination Processes.

The verification/validation is recorded on GSTT-TS-FORM-14 and must be approved by a Consultant Pathologist who will be involved in the interpretation of the test results for reporting (see Section 3.4).

3.3 Incorporating test into repertoire

Once the validation/verification is complete, the AD Operations Manager will ensure the following tasks are carried out:

- Update of CPH-INST-119 or HN-INST-36 Antibody/Probe repertoire
- The new test is included in EQA or alternative scheme for proficiency testing – CPH-INST-382 will be updated to indicate this
- Competencies are in place for staff to carry out this test
- IQC is in place (suitable control material is sourced, and recorded)

The Quality Manager will then carry out an audit of the new test (using checklist GSTT-TS-FORM-214) to ensure all steps required to incorporate the new test into the laboratory repertoire, have been completed according to this SOP, and GSTT-TS-SOP-1.

Throughout the process, CPHN-FORM-5 will be completed, showing each point of sign-off of the process, including sign-off of final approval for the test to be included in flexible scope. This will be saved on QPulse as a Histology or Head and Neck Pathology record.

The Quality Manager will then update CPH-INST-395/HN-INST-138 and load it to the Synnovis website, and then update CPH-REC-221/HN-REC-146 with the following information:

- Sign-off of the validation/verification plan (name/role/date) (see Section 3.4)
- Staff who carried out validation/verification (name/date/role) (see Section 3.4)
- Staff who completed validation/verification report (name/date/role) (see Section 3.4)
- Approval of outcome of validation/verification (name/role/date) (see Section 3.4)
- Audit of flexible scope process for the test (name/role/date) (see Section 3.4)

- Sign-off of process review (name/date/role) (see Section 3.4)
- Update of CPH-REC-221/HN-REC-146 and date loaded to the Synnovis website – **this is taken as the date that the new test was added to scope.**

3.4 Key roles

Any changes to the personnel undertaking these roles must be notified to UKAS at the earliest opportunity.

- AD Operations Manager – sign-off and oversight of the validation/verification plan
- Consultant Histopathologist – clinical approval of the outcome of the validation/verification
- Tissue Sciences Quality Manager – audit of process of incorporating test into repertoire; ensuring review of process is completed and final approval is documented
- AD BMS staff – carry out and document validation/verification
- Service Delivery Manager for Tissue Sciences – sign-off and oversight of the entire process, from new test request through to approval (i.e., confirmation that all necessary steps have been taken to place the test into Scope).

3.4.1 Competence for key roles

Competency for the key roles listed above must be assessed and will be reviewed bi-annually. Relevant criteria for competence are documented in the assessment forms listed below

- Clinical approval of validation/verification – competence of the Consultant Histopathologists to review the results of the validation/verification and approve the test for diagnostic use (CPHN-FORM-4)
- Development and Sign-off of validation/verification plan - competence of the AD Operations Manager to develop a plan for the validation/verification that is adequate to provide assurance for the testing results; to supervise the operation of the plan and the completion of the report (CPHN-FORM-2)
- Review of validation process - competence of the Quality Manager to establish and assure that governance of the process for introducing a new test to the repertoire has been completed (CPHN-FORM-1)
- BMS – competence in carrying out the validation plan and completing the validation report (CPH-FORM-388).
- Overall review of process to put antibody into Scope – competence of the Service Delivery Manager to review entire process from New Test Request, Validation/Clinical Sign off to completion of governance process (CPHN-FORM-3).

3.4.2 Impartiality of key roles

Personnel involved in the process of introducing new tests covered by the flexible scope must be impartial, i.e., must not be involved in other elements of the process, for example, the Quality Manager must not be involved in the development of the validation/verification plan.

3.5 UKAS notification

The Quality Manager will inform UKAS by email of any new tests that have been commissioned according to the process in Section 3.3. This will be done quarterly and involves sending the most recent version of CPH-INST-395/HN-INST-138 and CPH-REC-221/HN-REC-146 to UKAS.

3.6 Quality control and quality assurance

QC and QA for the tests included in the flexible scope are those described in CPH-SOP-84, CPH-SOP-90 and HN-SOP-89.

Assurance of compliance with this procedure (i.e., assurance that the flexible scope process is being followed for introduction of new clinics), will be provided by an annual internal audit of the flexible scope process.

3.7 Control of records

Any records pertaining to the flexible scope must be listed in GSTT-TS-SOP-18 Control of Records Procedure.

3.8 User information

Following completion of the commissioning process, the list of tests included in the flexible scope will be added to the Synnovis Cellular Pathology – Histology/Head and Neck Pathology page of the Synnovis website (as applicable to the test).

3.9 Removal of test from scope

If a test included within the Flexible Scope (i.e., documented on CPH-INST-395/HN-INST-138), is no longer to be performed, the AD Operations Manager will inform the Quality Manager of the date from which the test will be removed from the repertoire.

The Quality Manager will:

i. Update CPH-INST-395/HN-INST-138 on QPulse (remove the test in question).
ii. Archive the relevant test review record on QPulse.
iii. Update CPH-INST-395/HN-INST-138 on the Synnovis website
iv. Update the 'Removal of test from scope' columns on CPH-REC-221/HN-REC-146 with the required dates.
v. At the end of that quarter, send the updated CPH-INST-395 and CPH-REC-221 (AD), or HN-INST-138 and HN-REC-146 (H&N) to UKAS to inform them of the removal from scope of the clinic concerned (see Section 3.5).

4. References

1. European Committee for Standardization. Medical Laboratories – Requirements for quality & competence (ISO 15189:2012). October 2012.
2. GEN 4. UKAS policy and general guidance for the implementation and management of flexible scopes of accreditation. Edition 1. October 2019.
3. EA-2/15 M: 2019. EA Requirements for the Accreditation of Flexible Scopes. April 2019.