Surgeons working within breast units around the UK have been given a unique resource to assist them in training younger surgeons in a vital breast cancer surgery procedure.

Interactive Clinical Anatomy – Axillary Surgery is a revolutionary, three-dimensional interactive software resource that is being used to support training in breast cancer surgery. Developed by Primal Pictures, in partnership with The Royal College of Surgeons of England, the DVD is part of a training package that has been delivered to every single breast unit in the country.

“As well as being responsible for surgical standards throughout the UK, we are the largest provider of post-graduate surgical education in the country,” explains Jonathan Fountain, Development Director at The Royal College of Surgeons. “It is our responsibility to ensure that surgery training is provided in a structured and clear manner, reshaping our educational materials using the latest technology, to meet the needs of the next generation of surgeons. We have to deliver a training package that ensures surgeon competence and patient safety.

“Axillary surgery is complicated and can offer huge benefits, as well as huge risks to patients. In developing a training programme, we had to make sure that we could provide as much detail as possible,” he continues. “We worked in partnership with Primal to ensure that the right clinical content was included on the DVD and breast cancer surgeon Fiona MacNeill led the development of expert clinical and educational input – including videos of the surgical procedure being carried out. The result is a fantastic training tool that has been extremely well received.”

The software provides an easy-to-use guide to axillary anatomy and surgery, including step-by-step coverage of the surgery itself and highlighting complications and breast reconstruction. It shows this difficult area of anatomy in three-dimensional images that are easy to understand. It also provides self-assessment questions for the procedure and 25 surgery videos with a voiceover guide to the procedure.

“I was delighted to be involved in the development of this DVD,” comments Fiona. “A surgeon’s performance in this area depends on a sound knowledge of the complex axillary anatomy. The interrelationship of the important structures in the axilla is difficult to convey in a one-dimensional picture or describe in a piece of text.”

“By being able to demonstrate the procedure through video footage and three-dimensional images, we were able to bring it to life,” she explains. “The additional advantage of being able to rotate images and peel back the layers means that surgeons can not only gain a really accurate insight into how the surgery works, but they can also ensure that their knowledge of this part of the human anatomy is accurate and comprehensive.”

The software is part of a unique, dynamic human anatomy resource created by Primal Pictures that provides a complete range of three-dimensional images, animations and detailed text for use in healthcare and patient education. The software not only offers accurate clinical detail but it is also the only software resource to offer interactive images that rotate and display up to 24 layers for in-depth anatomical exploration.

“The work Primal has done in creating this resource is fantastic and we support it totally,” comments Jonathan. “Industry involvement is essential to the development of new education and training methods. Human anatomy is a difficult, but key part of all medical education and all doctors, especially surgeons, need a really in-depth knowledge of the subject. This software is a fantastic resource for both teachers and students and is a valuable addition to conventional teaching methods.”