



## **Jurisdiction J (JJ) June 1, 2020 Open Meeting Transcript**

### **Dr. Garret:**

In accordance with PIM Ch. 13, Section 13.2.4.4, we are going to make an audio recording of this Open Meeting and, as part of the LCD record, assure the recording is maintained on our Palmetto GBA website. On behalf of Palmetto GBA, I consent to the recording of this meeting. I will now start the recording. Okay, we have started the recording of this Open Meeting in compliance with CMS. For the record, prior to doing so, I announced that Palmetto GBA would make an audio recording of the Open Meeting and consented on behalf of Palmetto GBA. Are there any questions on this issue?

We have one scheduled presentation that's on MolDX: Liquid Biopsies for Solid Organ Transplantation. Dr. Michael Spigarelli and Matt Notarianni from Immucor will be speaking.

### **Michael Spigarelli:**

I'm going to let Matt start the presentation and then I'll do an introduction as we move forward.

### **Matt Notarianni:**

Thanks Dr. Garret and everyone at Palmetto. Good afternoon. Thank you again for the opportunity to speak with you all today virtually. Hopefully everyone is safe and healthy during this crazy time. My name's Matt Notarianni, and I'm the senior director of corporate development and external communications at Immucor, and as we heard earlier, I'm joined by Dr. Mike Spigarelli, who heads up our Medical Affairs. As Dr. Garret pointed out, we're here to speak today about the recently proposed DL38568, Liquid Biopsies for Solid Organ Transplantation, which was published in late April. So, in terms of disclosures, which is slide one, both Dr. Spigarelli and I are employees of Immucor, which offers the k-sort assay.

On slide two, just to kind of lay out what we'd like to talk about today at a high level over the next few minutes. First, really outline the unmet need in this market, and second, provide an overview of the K-sort assay. Finally, we'll discuss some of the evidence gathering that has been completed and processed, and how we feel the K-sort assay aligns to the proposed coverage document.

So, jumping into slide three, I'll walk through a little bit of the clinical background and unmet need here. Then I'll have Mike to talk a little bit more about what k-sort is and the data we've generated. But I'm sure the audience well knows, end stage renal disease incidence and prevalence in the U.S. is among the highest in the world. This patient group is large and growing and while only accounting for about 1% of total Medicare beneficiaries, it's estimated that the end stage renal disease treatment and management cost to Medicare exceed \$35 billion annually. So, clearly this group considerably impacts Medicare's resources and annual spend.

As we move on to slide four, the studies have pointed out that kidney transplant is the therapy of choice for many of these patients. And that's true with over 20,000 kidney transplants performed each

year in the U.S. That's a number that's been growing considerably year over year. This method of treatment is helpful, both for the patient and payer. So, when it works, a kidney transplant is associated with improved survival and quality of life versus dialysis; and further, the expenditures for a successfully transplanted patient versus dialysis are considerably lower. When a transplant fails, the cost, both to the patient and in terms of Medicare expenditures, can make this very expensive. It's worth noting as well, that graft survival rates decline with each year after transplant. As a result of all of this, several in vitro diagnostic companies, like ourselves, have really set out to develop tools to help clinicians improve monitoring and outcomes for these patients and avoid these costly and likely uncertain complications. I'd like to turn it over now to Dr. Spigarelli to discuss a little bit more on the unmet need, as well as our assay.

**Michael Spigarelli:**

Thanks, Matt, and thank you to everybody who's online and for the opportunity to speak. As Matt said, I'm Mike Spigarelli. I'm a scientist, physician, MD, PhD, board certified in internal medicine, and I'm also a board-certified clinical pharmacologist and spent my time working in transplant immunosuppression, as a background. I serve as Immucor's Vice President for Medical Affairs. As Matt says, kidney transplants are a fantastic treatment when they function well. Currently, the methodology for determining dysfunction is a graft biopsy, which requires a needle to be stuck into the graft to obtain a piece of tissue to determine if rejection is present or not. This gold standard for acute rejection diagnosis has several well-known, well-documented limitations.

First of all, it's a high cost procedure. Less invasive methods such as being proposed in this omnibus collection are likely to reduce costs. There is a notable risk, and the risk of procedure related as risks advance, including graft bleeding, which comes to about 6% across all indications, or an AV fistula formation, which can be up to 14%, are all detrimental to patients and the cost of their care. There is also a sizeable sampling error, leading to about approximately 20% clinical discordance between rejection and biopsy results. And that's been demonstrated to have a very, very high interobserver variance. Partially this is due to the fact that a transplanted organ is a valuable commodity. Only a small piece of tissue from a few select places can be taken at a time, and that may well miss a rejection phenomenon occurring early on.

There's also an impracticability and patient intolerance of repeat biopsies. So, if a biopsy is inconclusive, asking the patient to come back can be problematic both in terms of patient convenience, running the risk of additional comorbidities, as well as the cost associated with that. The need for effective post-transplant surveillance options is pressing and growing as the number of patients living with a functional kidney graft has almost doubled from 2005 to 2016 and is well over 200,000 people nationally. This number continues to increase.

Slide number six. Another functional issue with biopsy is that a biopsy is a static point in time that is taken with a certain percentage of costs to determine what is going on in that graft. K-sort, the kidney solid organ response test is a novel 15 gene RNA expression-based assay that uses whole blood samples, has been validated in current clinical trials, and designed for enhanced post-transplant graft surveillance and immune quiescent monitoring in renal transplant patients. Evaluation of a transplant's dynamic immune response profile, combined with the best practice clinical care, can acutely improve transplant rejection risk stratification, accelerate the selection of appropriate clinical decision making, reduce unnecessary biopsy use, and fundamentally, with the right studies completed, demonstrate a pathway to earlier intervention and slide six shows the hope of all of these technologies covered by this graft coverage proposal. The ideal window for diagnostics intervention is when the injury or potential injury is still reversible, and the graft could still maintain its full function and its full viability.

Slide number seven. Immucor supports, Medicare coverage of K-sort and other validated assays that are backed by robust clinical data. For K-sort, we have a variety of studies. We have the original study, which is a peripheral blood diagnostic test for acute rejection and renal transplantation, which was the biomarker discovery paper for K-sort that has been published. We have the K-sort assay to detect renal transplant patients at high risk for acute rejection. There's also the multi-center art study, which the art 100 cohort is a validated K-sort algorithm that defines and describes the assay. We have conducted a retrospective European transplant evaluation looking at four different transplant centers. That is completed and in publication process as we speak.

We also have other collaborators doing work, including Fabio from new CSF, who's looking at the prism study, looking at high PRA individuals before and during transplant using K-sort as a predictor of rejection, the sailor study, which monitors alloimmune response in a Swedish cohort, and those results have been described in an interim basis. In addition to all of our existing data, Immucor encourages continued industry-wide development of clinical utility evidence to resolve outstanding Palmetto and MoIDX considerations. And with that, I'll turn it back over to Matt.

**Matt Notarianni:**

Thanks Mike. So, to conclude our remarks today, K-sort is well in line to the proposed LCD based on the language around the coverage requirements, which is what we show in each of these boxes. Immucor appreciates the efforts of MoIDX and its partners to also provide a complimentary level of clarity regarding coding and reimbursement processes for the liquid biopsy assay for solid organ transplant. To wrap up, thank you again for your time today, and we'd be happy to take any questions.

**Dr. Garret:**

This is Dr. Garret. This presentation is open for questions.

Hearing none, do we have any general questions?

**Mike Nall:**

Dr. Garret, this is Mike Nall with Biocept. I had a few comments about another LCD.

**Dr. Garret:**

Proceed.

**Mike Nall:**

Thank you for the time today. I'm the president and CEO of Biocept. My name is Michael Nall. With me here in our conference room, socially distancing six feet apart, are Dr. Vina Singh, who is our Senior Vice President of Medical Affairs and Medical Director. I have Cory Dunn, who is our Senior Vice President of Commercial Operations, Dr. Julie Mayer, who heads up our CLIA operations, as well as Barbara Bough, who heads up our Scientific Affairs. We're very happy to be able to see this LCD today and thankful for the work you all have put into it. At Biocept we're a CLIA and CAP accredited lab in San Diego, and we provide liquid biopsy testing for patients diagnosed with cancer. The tests are used by physicians to make treatment decisions and are based on both CTCs and we have assays and CT DNA. So, assays for CTCs and assays for CT DNA.

One of our first assays we launched was to detect HER2 amplifications on CTCs. Now the clinical utility of HER2 testing for patients diagnosed with breast cancer is well understood, and our test is marketed as a compliment to that initial tissue biopsy and the HER2 testing that's performed. So, we want to thank Palmetto and MoIDX for the initiative in developing this policy and appreciate the opportunity to provide our comments. We fully support this policy, providing coverage for assays to detect circulating HER2 positive tumor cells in breast cancer patients. This paradigm is consistent with current clinical practice and well supported by clinical data and guidelines. Based on the literature though, we are requesting one additional criterion be added to the policy, which currently proposes coverage when the patient's cancer has not previously been tested for HER2, or the patient has newly metastatic cancer and a metastatic lesion has not been tested for HER2.

We're recommending adding a third criteria for coverage, when the patient demonstrates signs of clinical, radiological, or pathologic disease progression. The addition of this criteria would facilitate coverage for repeat HER2 testing when clinically appropriate. We know from the literature that breast cancer tumors are heterogeneous and biomarker status evolves over the course of the disease.

Determining the most current biomarker status for a patient is critical in order to administer the most appropriate therapy. Continuing to give ineffective therapy, or conversely depriving a patient of potential response therapy, negatively impacts patient outcomes. So, with that, we thank you very much.

**Dr. Garret:**

Thank you. I appreciate your comments. That concludes our formal meeting. Are there any other questions or comments?

Okay. If you were unable to register, but did attend the meeting, please send Melissa Robinson an email confirming your presence. That email is [melissa.j.robinson@palmettogba.com](mailto:melissa.j.robinson@palmettogba.com). If you have comments that you'd like to make on any of our draft LCDs, each LCD has an email on them for submission of comments. It'll either be [a.policy@palmettogba.com](mailto:a.policy@palmettogba.com), [b.policy@palmettogba.com](mailto:b.policy@palmettogba.com), or [MoIDX.policy@palmettogba.com](mailto:MoIDX.policy@palmettogba.com). Remember that in your comments, if there are any additional coverages that you wish to have, we require that they be fully documented with complete articles, not abstracts, but complete articles supporting your position. The end of the comment period has been extended due to the COVID-19, and that end will be July 7th.

If there are no other questions or comments, this will conclude our meeting. So, are there any other comments or questions? Thank you much. This meeting is adjourned.